

Program EVALPLOT
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.

Tele: 925-443-1911

E.Mail:redcullen1@comcast.net

Web:redcullen1.net/HOMEPAGE.NEW

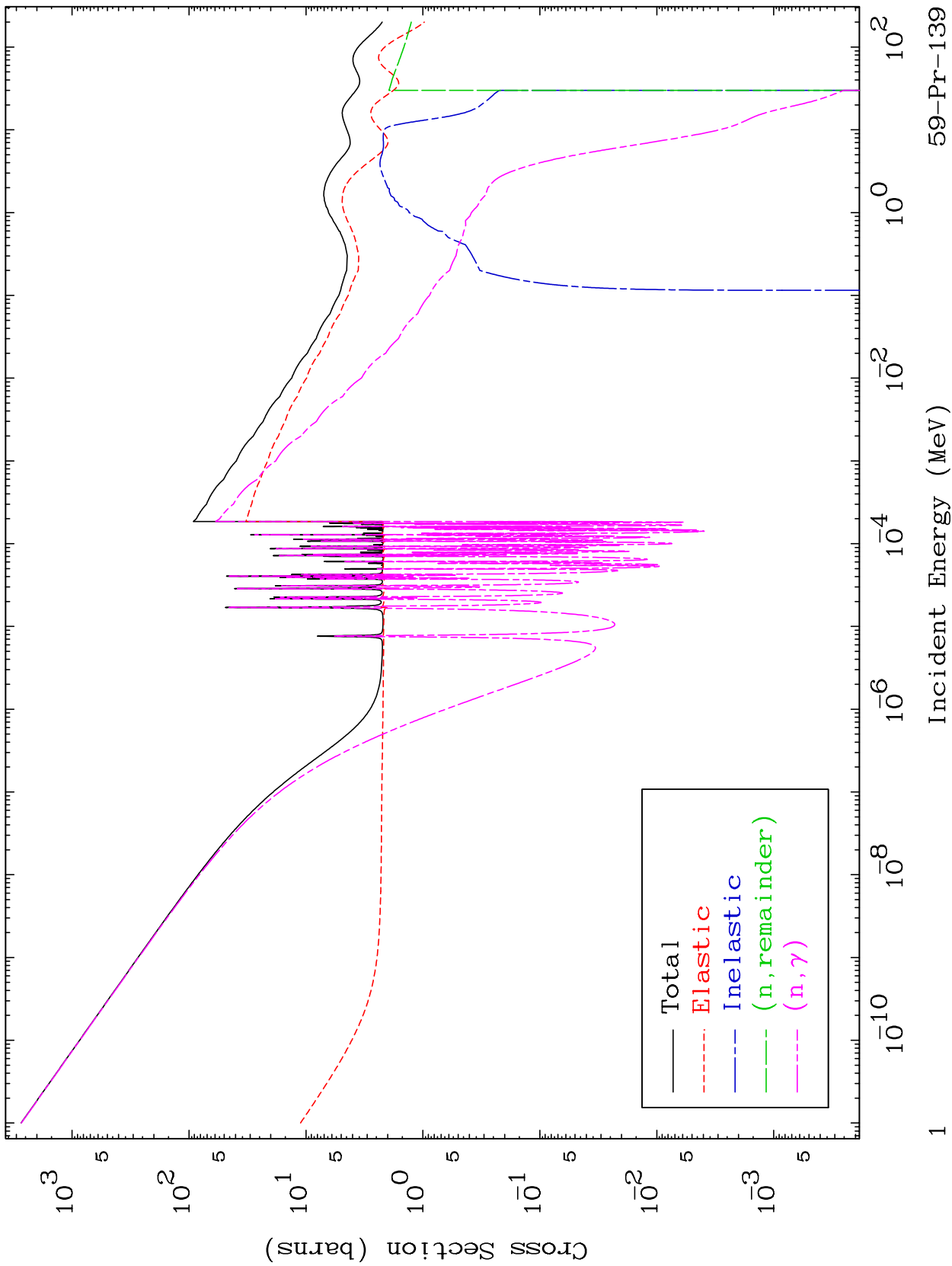
Press Mouse Button to Start

MAT 5919

Major

293 Kelvin Cross Sections

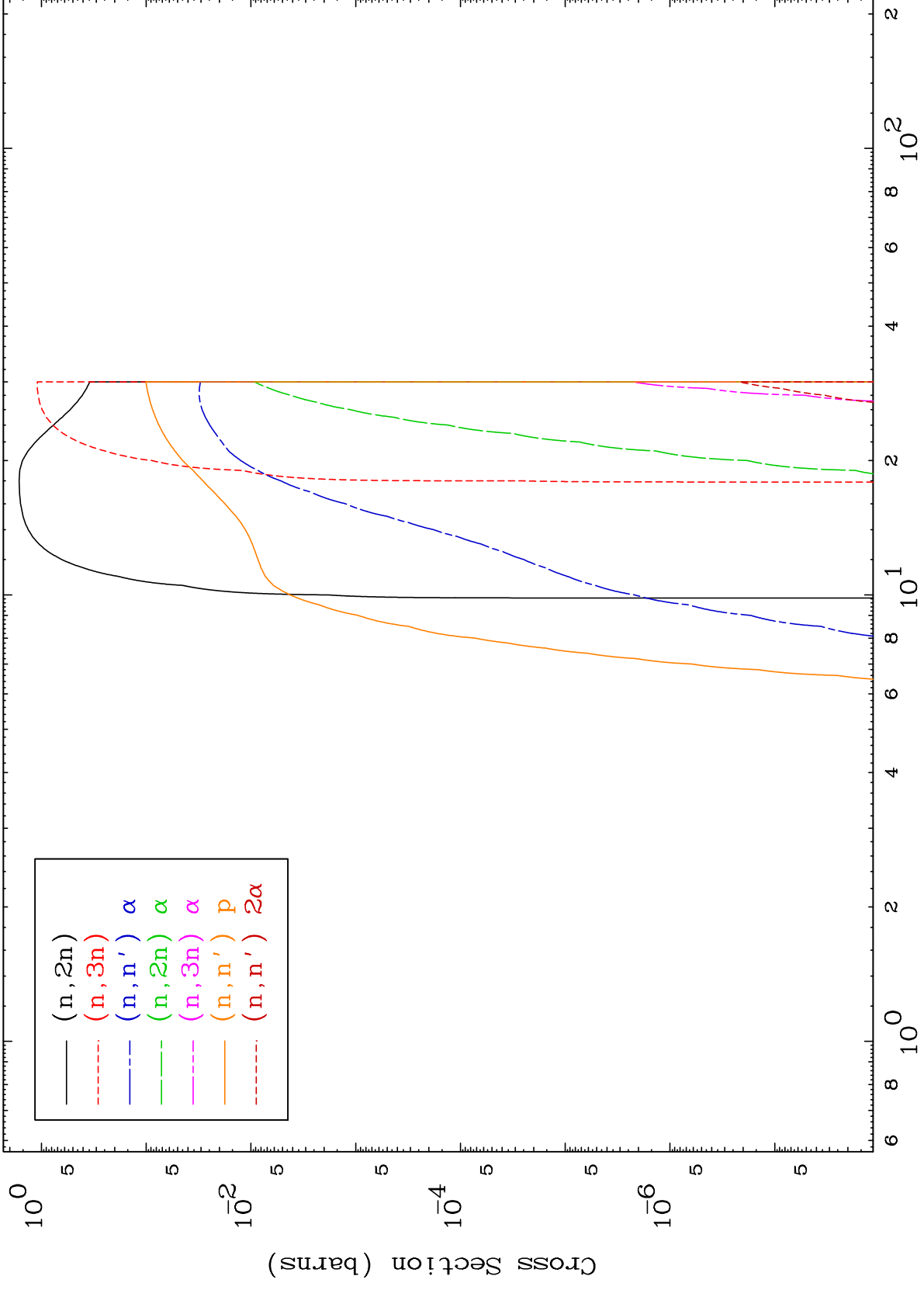
59-Pr-139



MAT 5919

Neutron Production
293 Kelvin Cross Sections

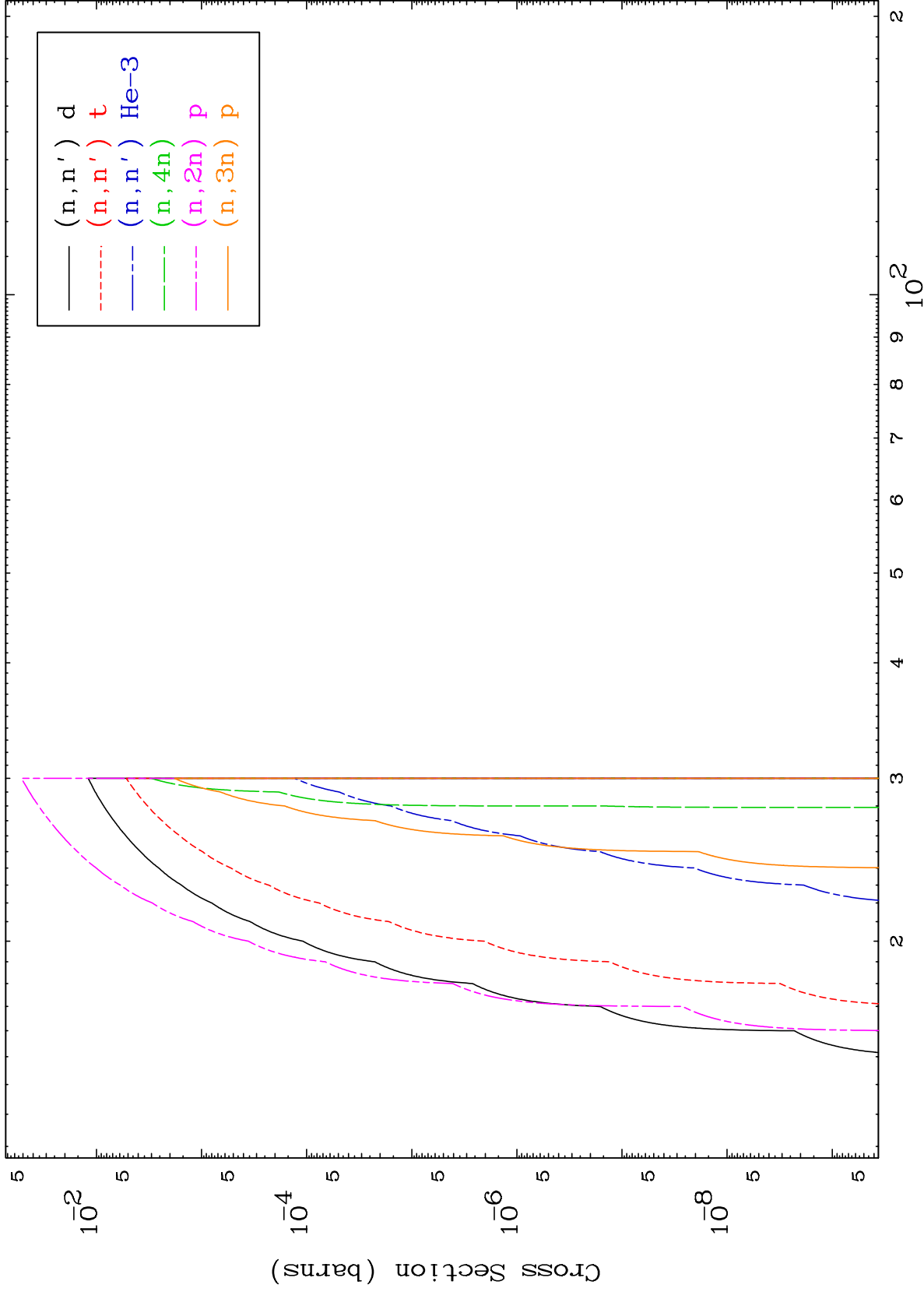
59-Pr-139

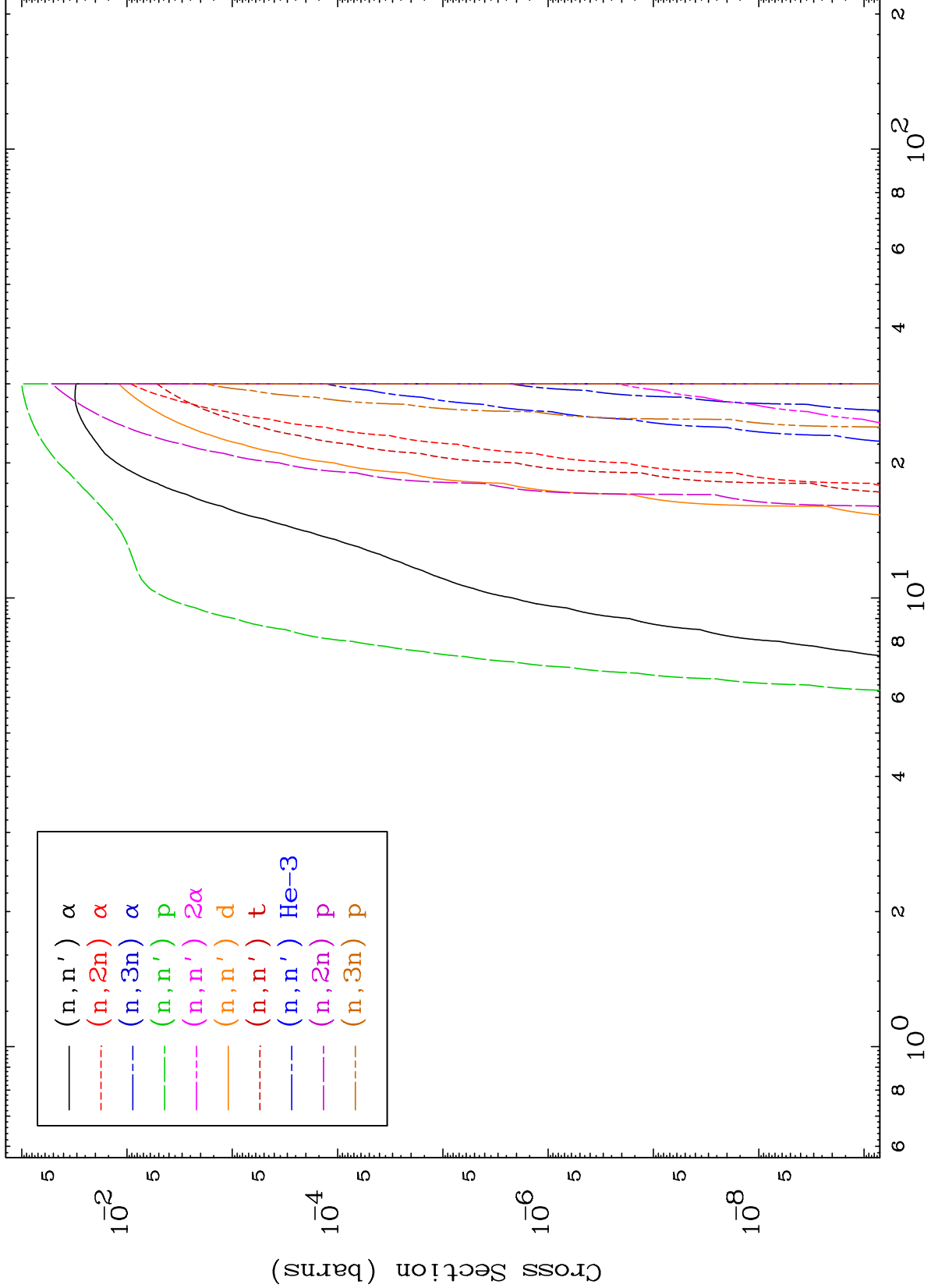


2

Incident Energy (MeV)

59-Pr-139

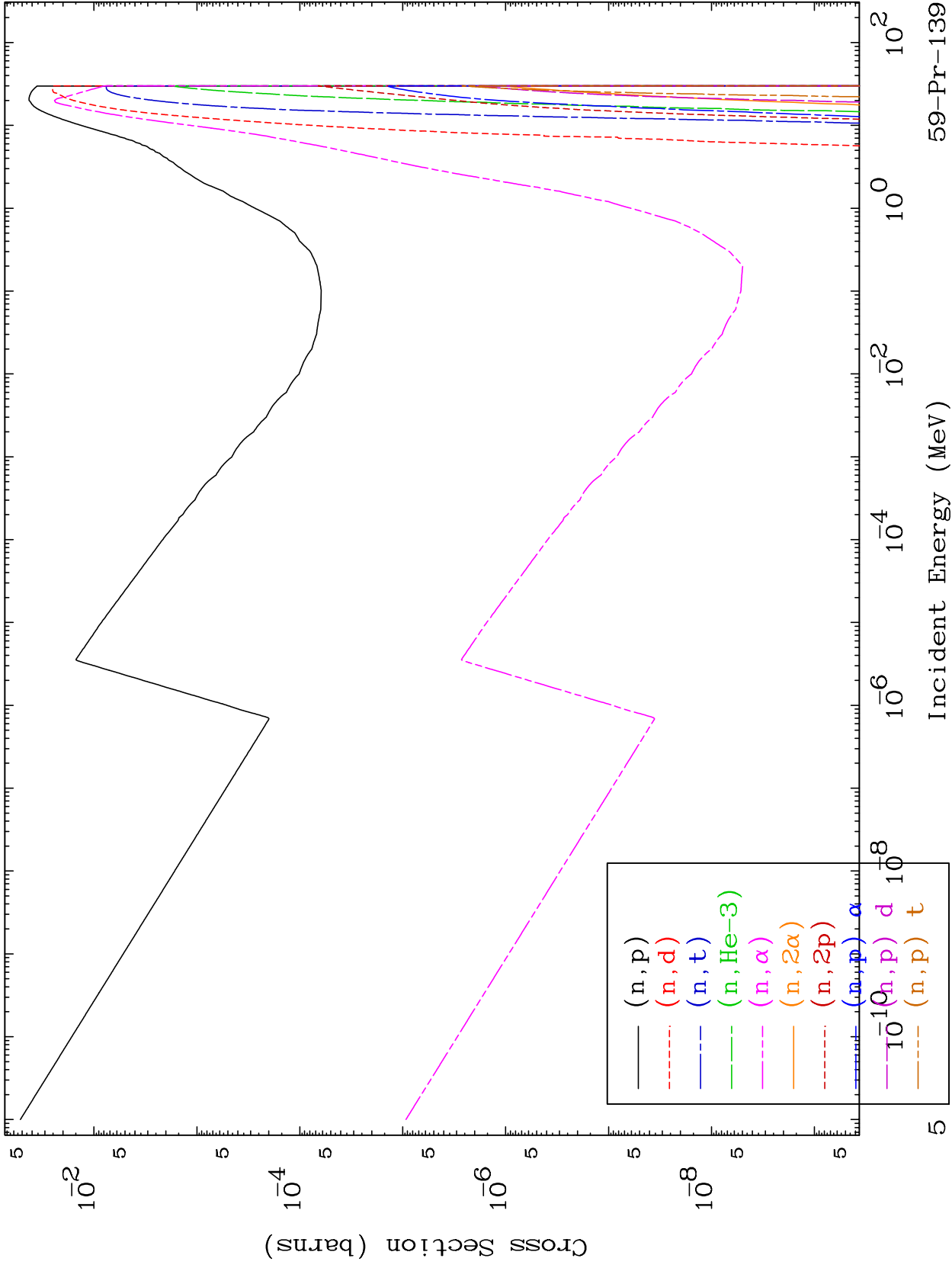




MAT 5919

Charged Particle
293 Kelvin Cross Sections

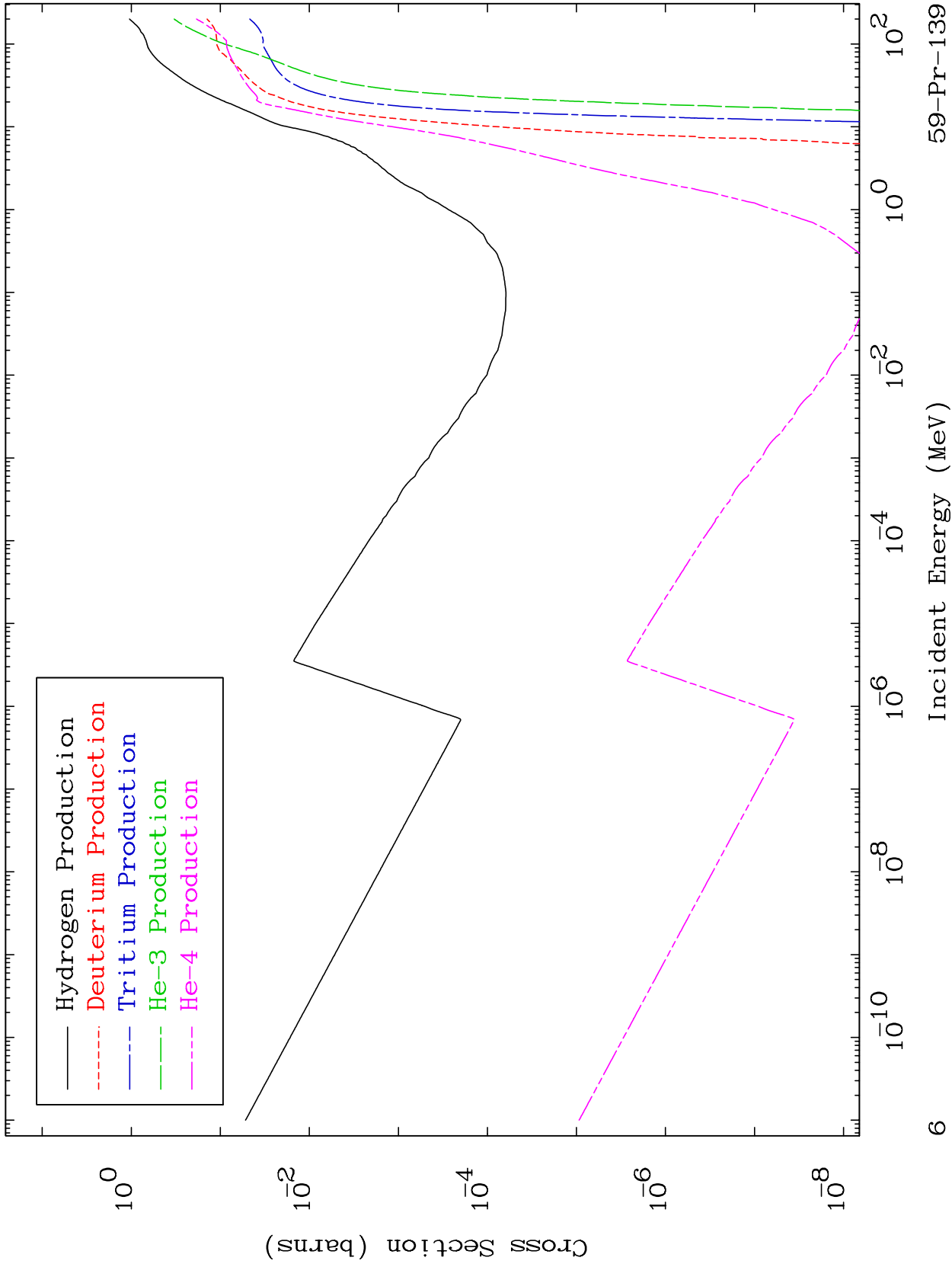
59-Pr-139



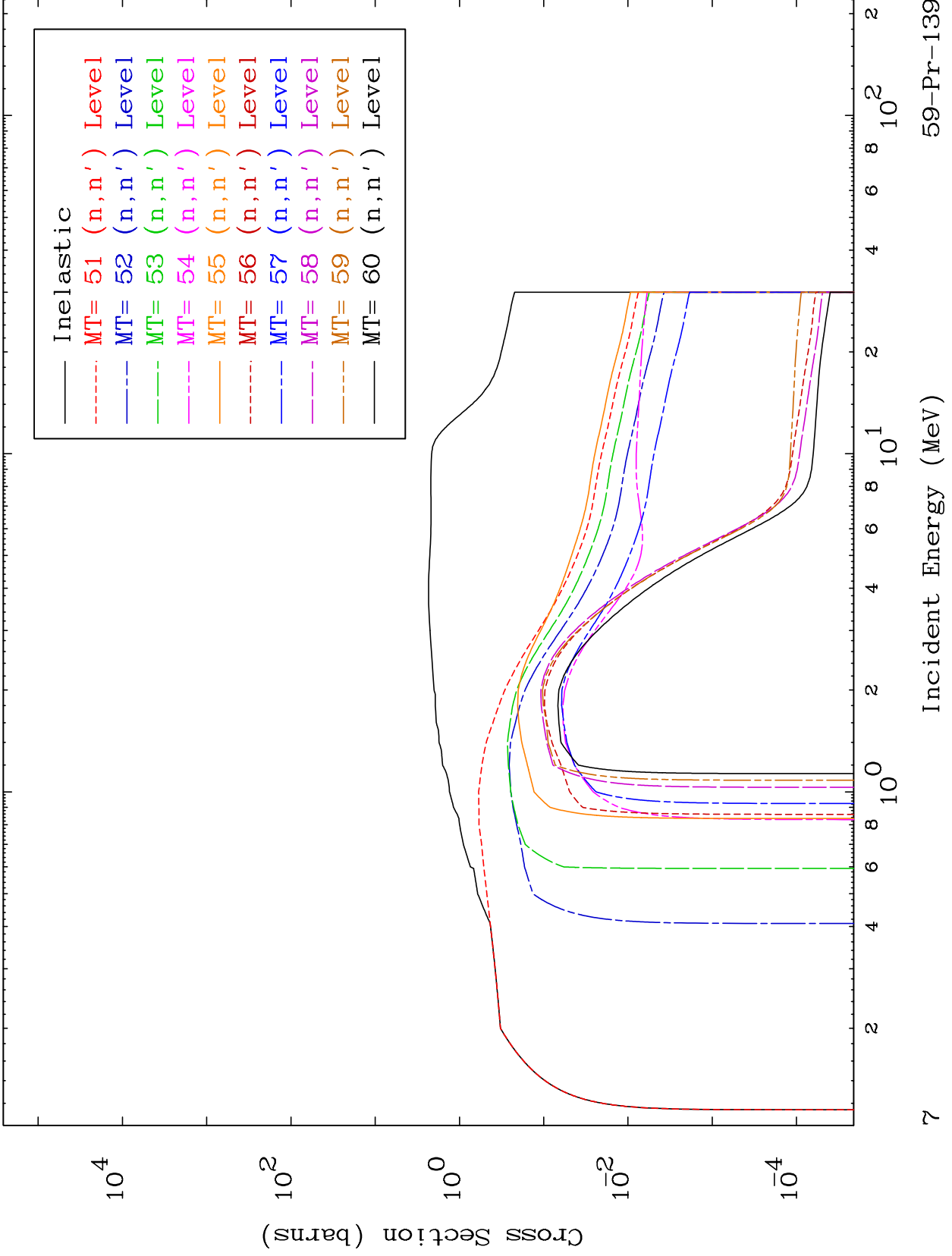
MAT 5919

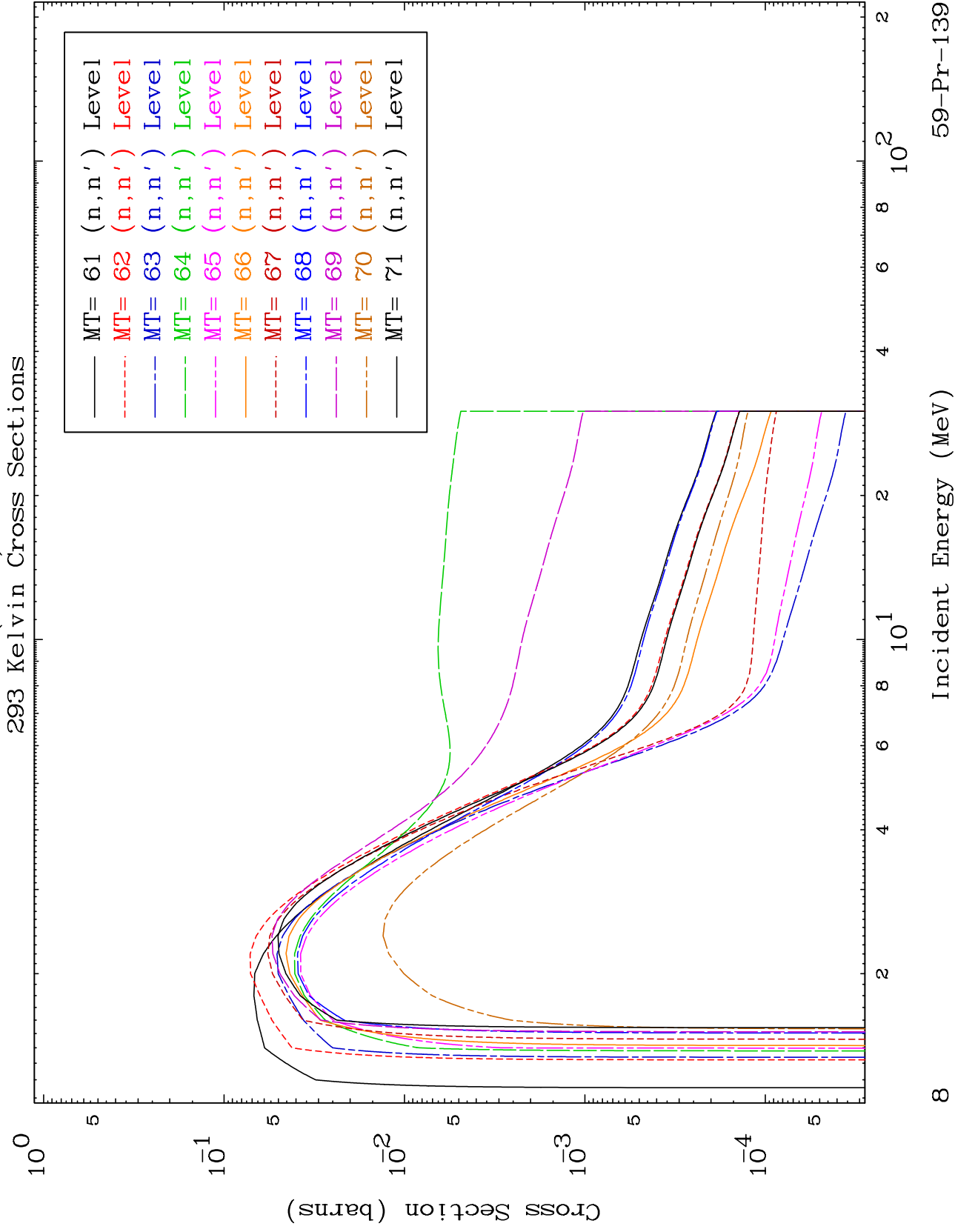
Particle Production
293 Kelvin Cross Sections

59-Pr-139

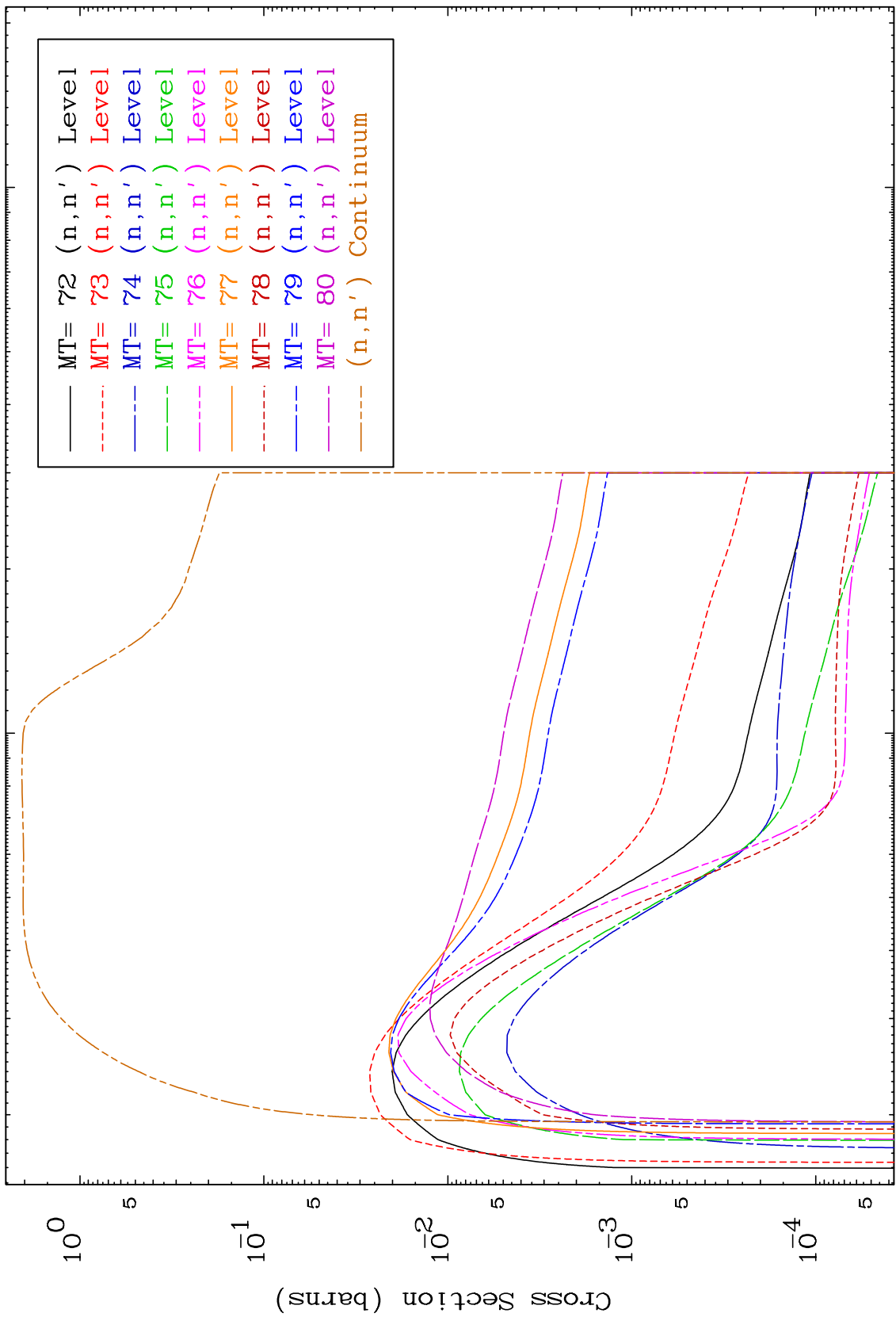


293 Kelvin Cross Sections





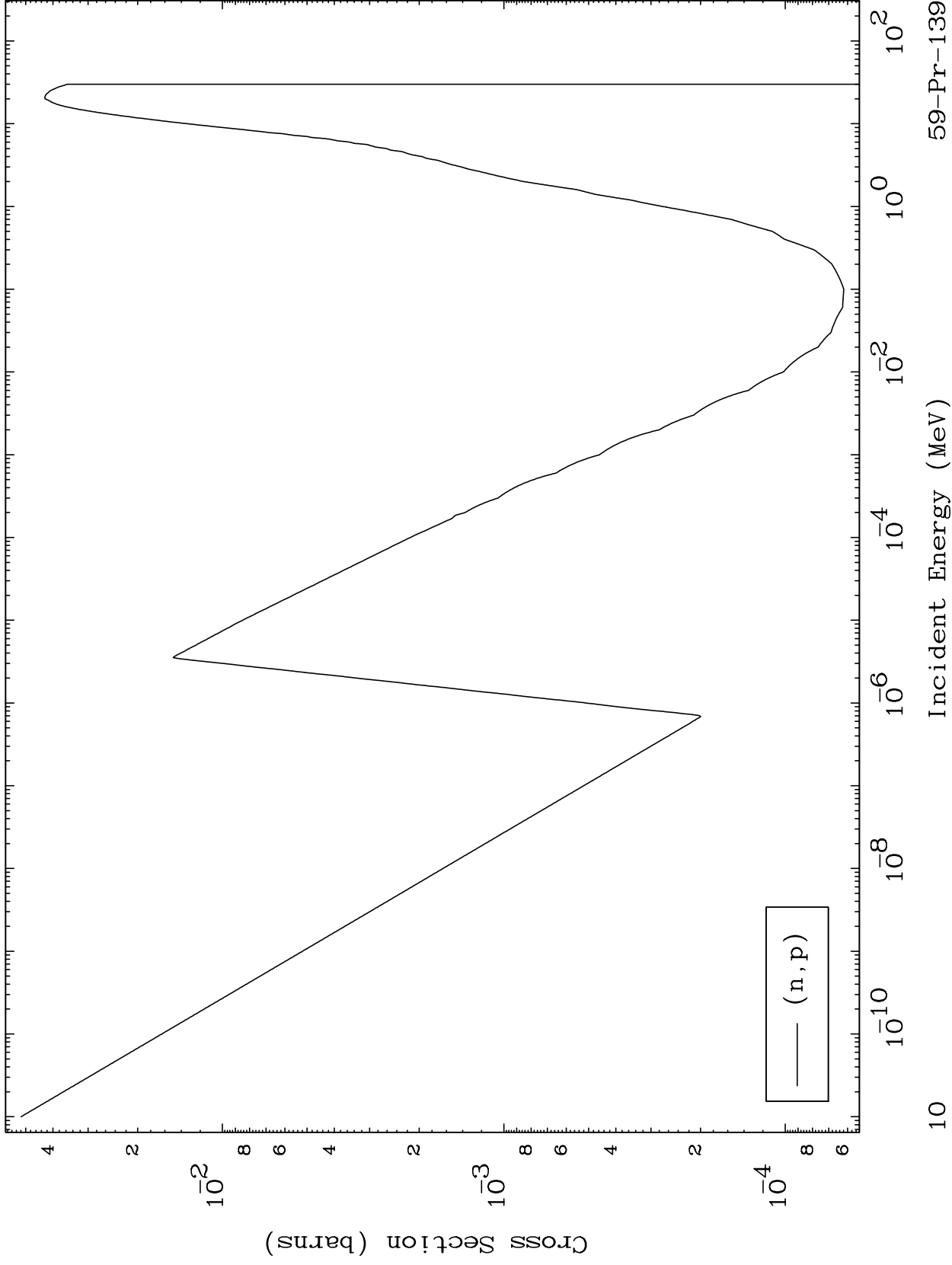
293 Kelvin Cross Sections



MAT 5919

(n,p) Levels
293 Kelvin Cross Sections

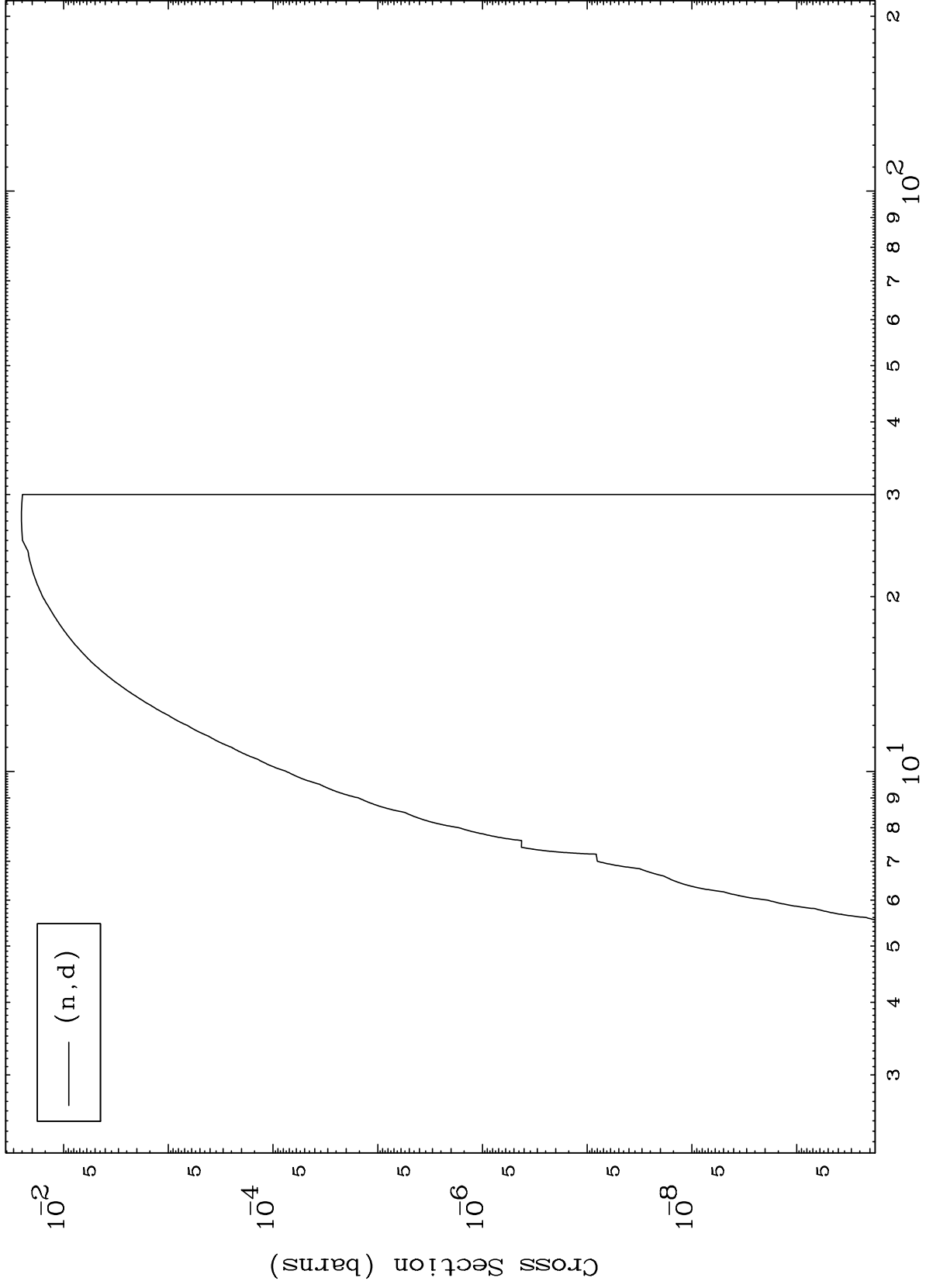
59-Pr-139



MAT 5919

(n,d) Levels
293 Kelvin Cross Sections

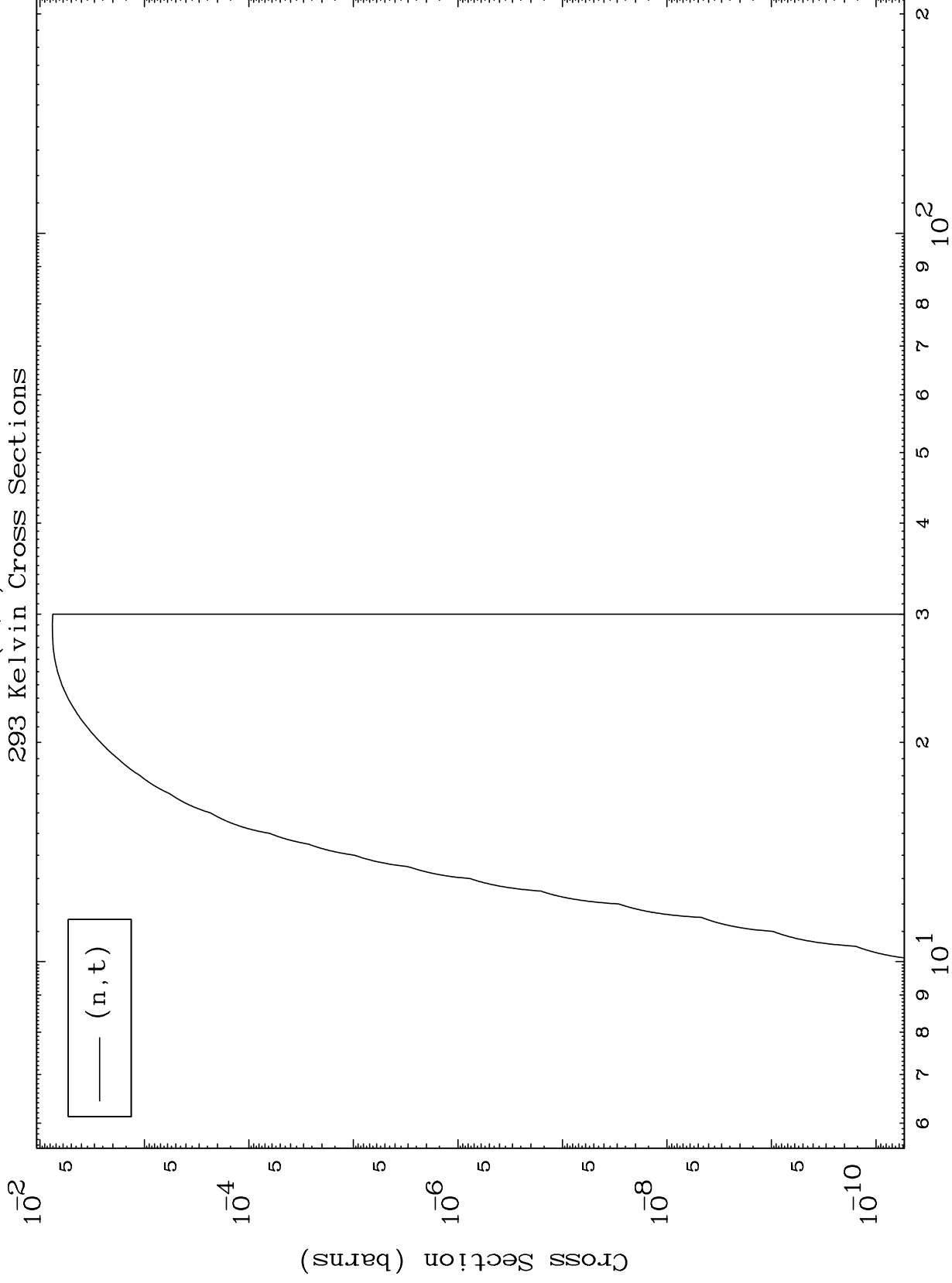
59-Pr-139



MAT 5919

(n, t) Levels
293 Kelvin Cross Sections

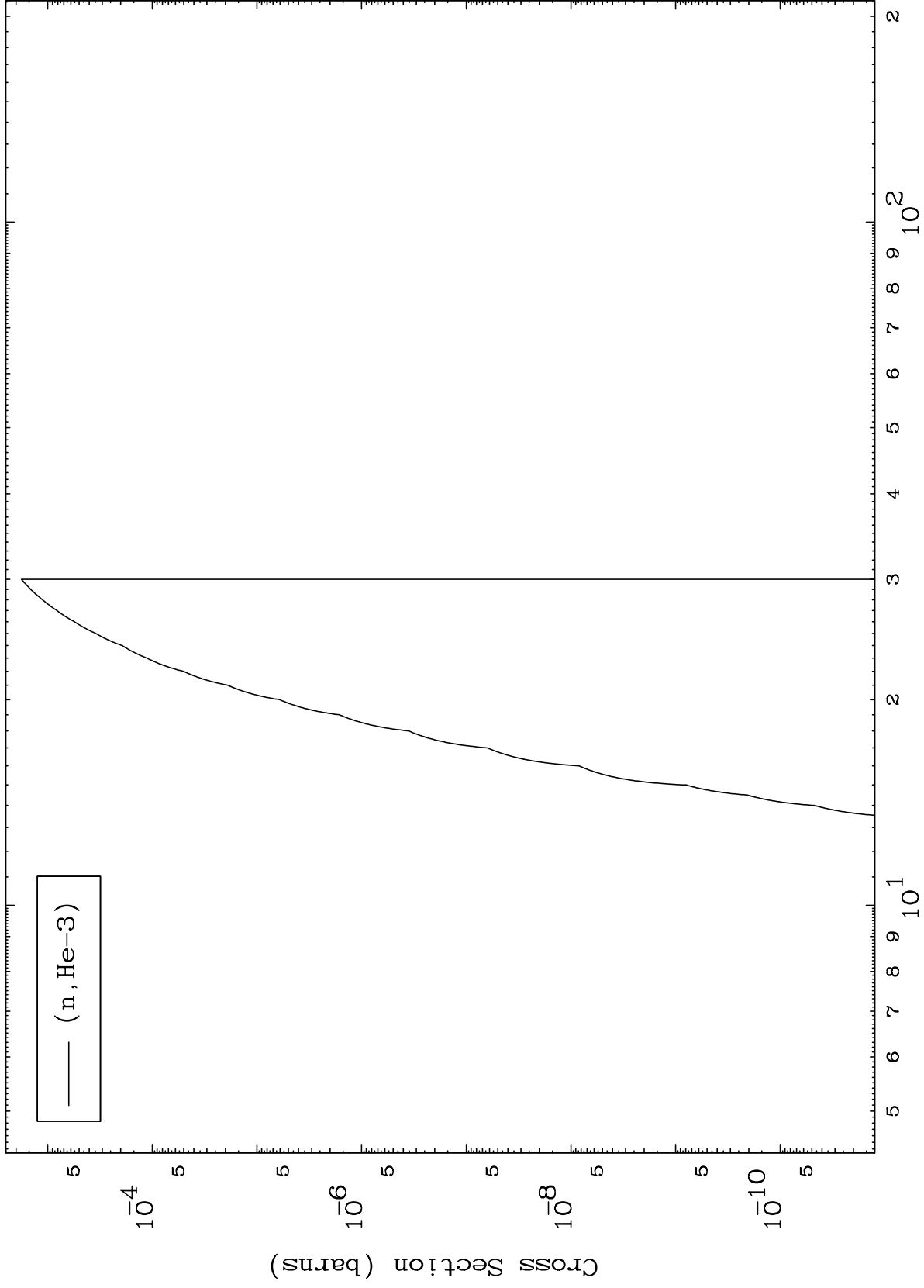
59-Pr-139



12

Incident Energy (MeV)

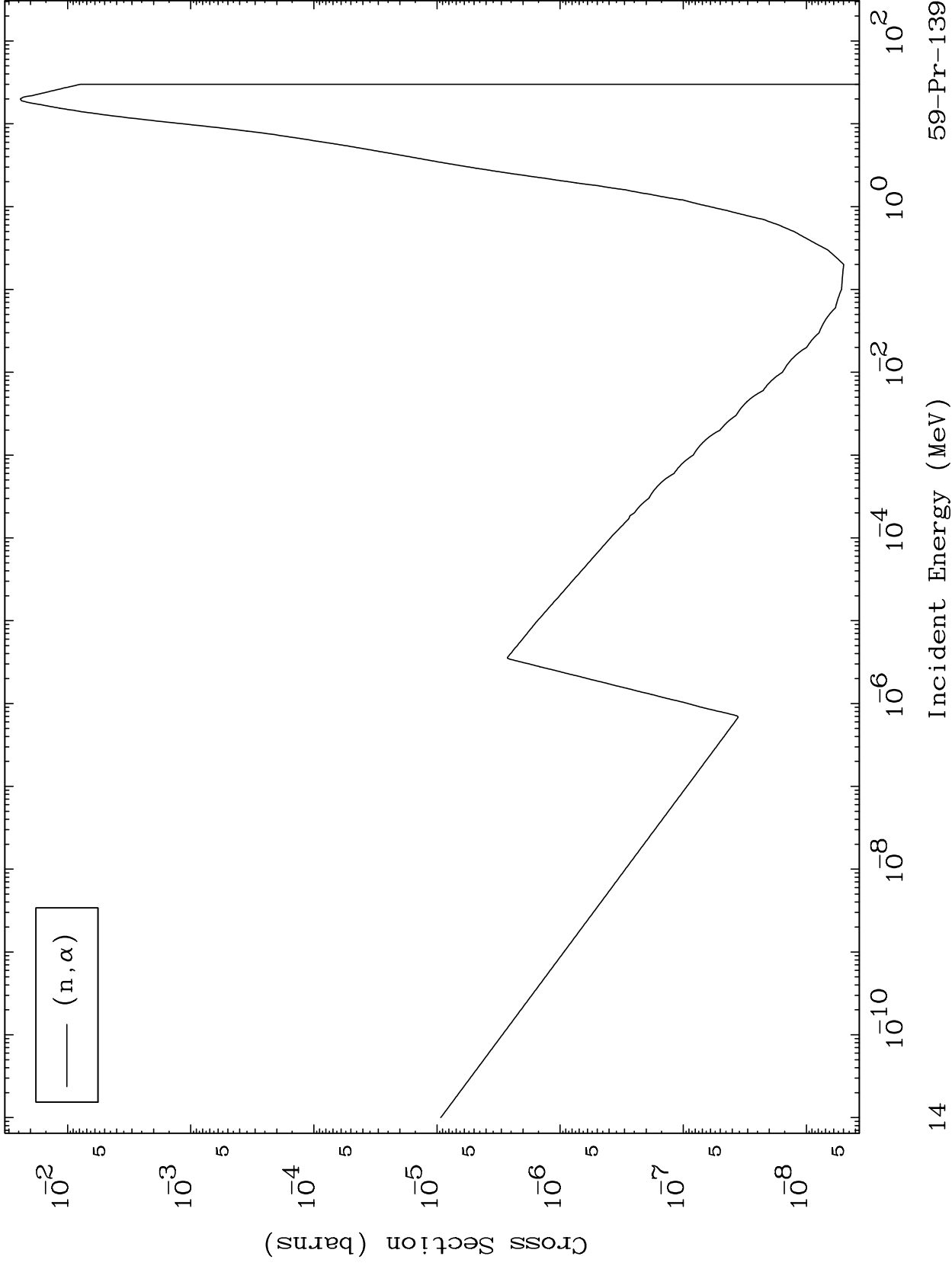
59-Pr-139

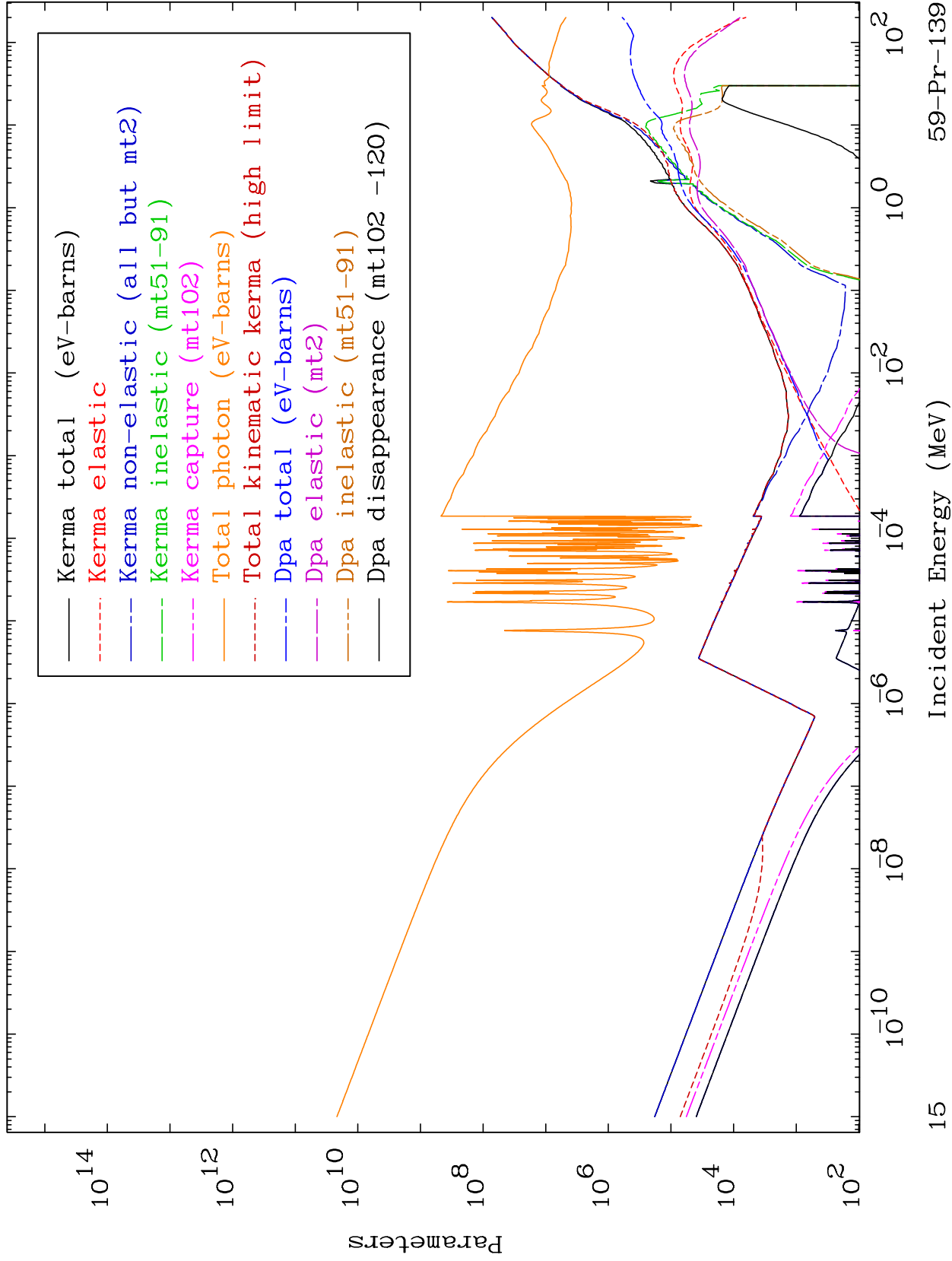


MAT 5919

(n, α) Levels
293 Kelvin Cross Sections

59-Pr-139

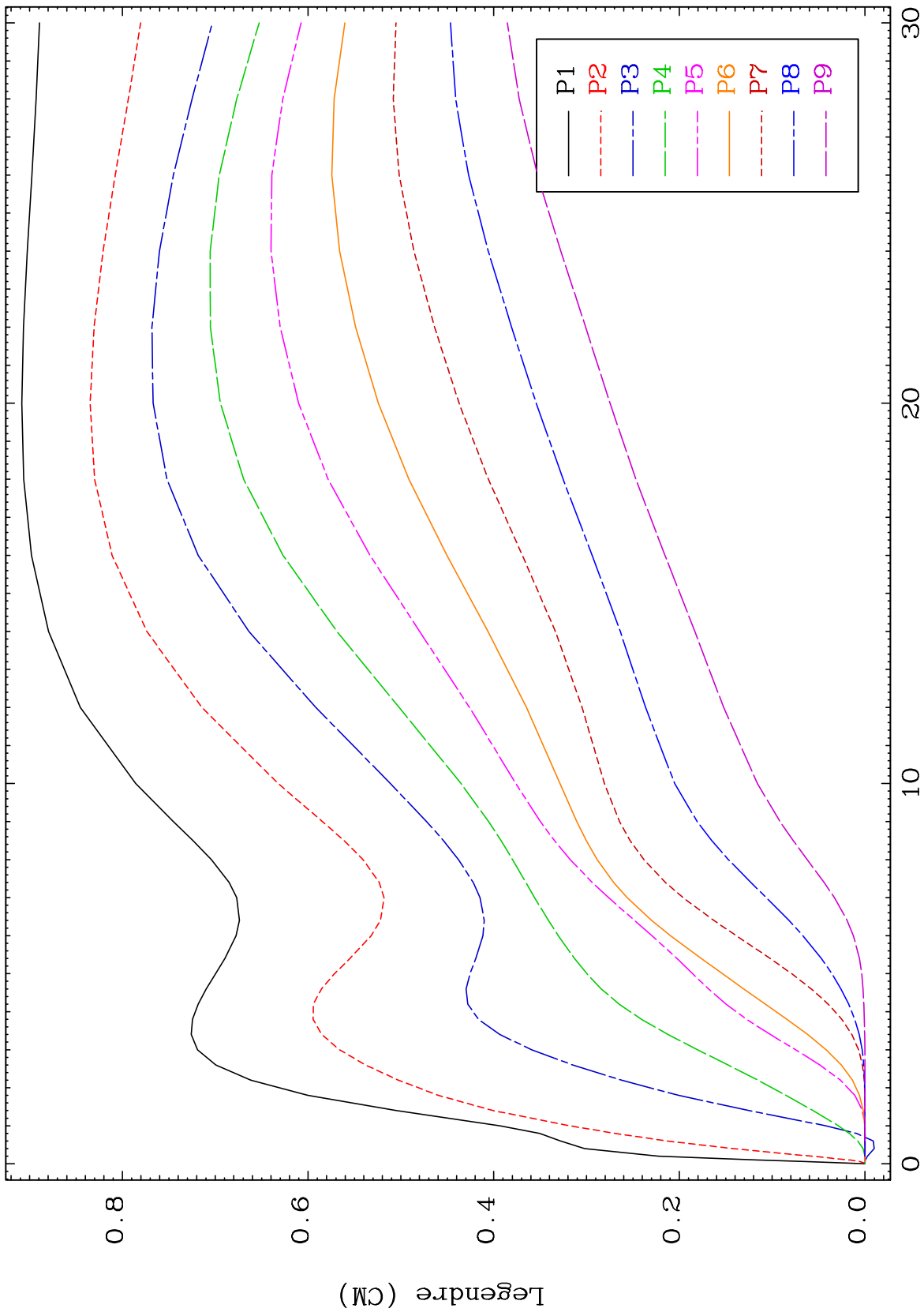




MAT 5919

59-Pr-139

Elastic Legendre Coefficients



59-Pr-139

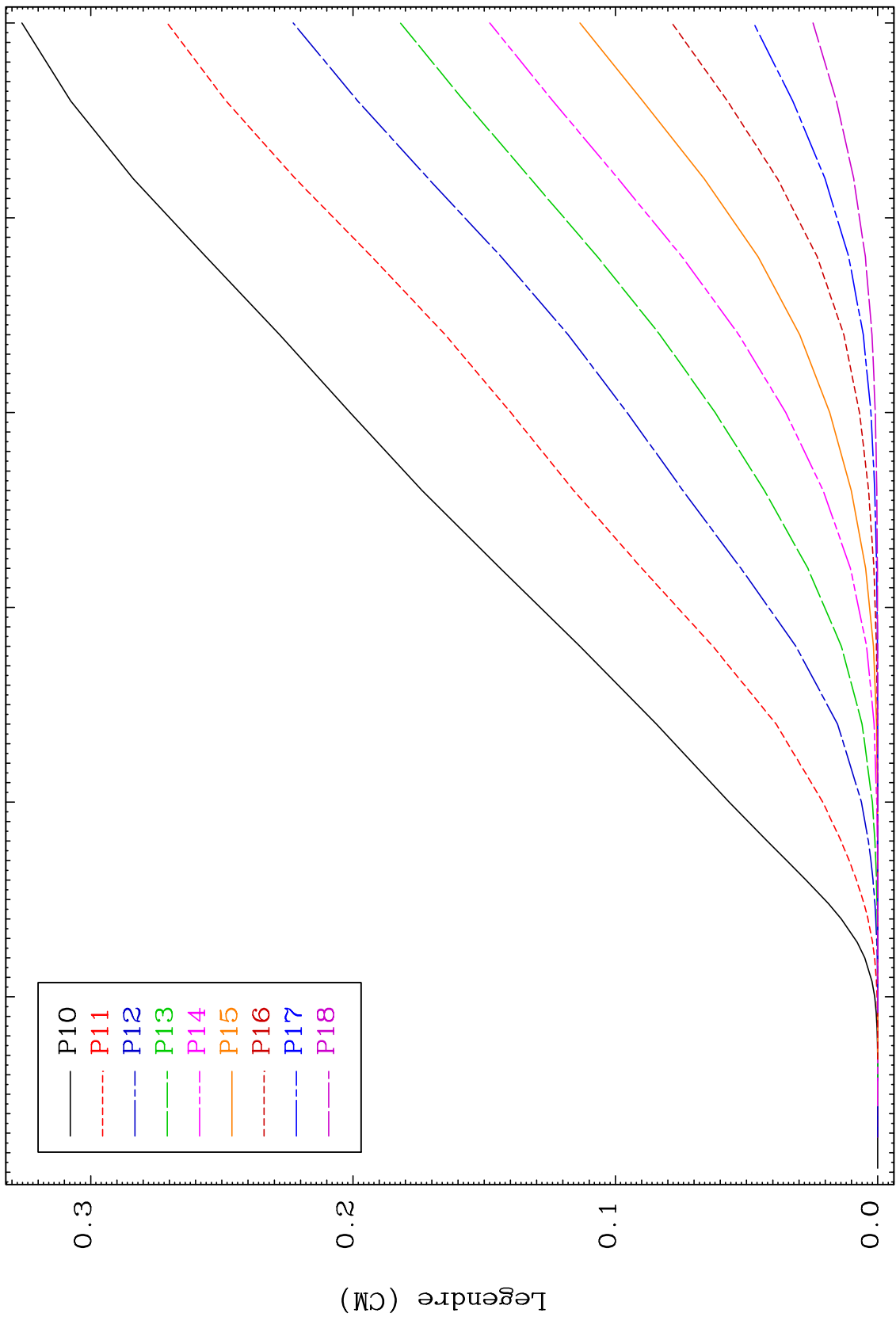
Incident Energy (MeV)

16

MAT 5919

Elastic Legendre Coefficients

59-Pr-139



17

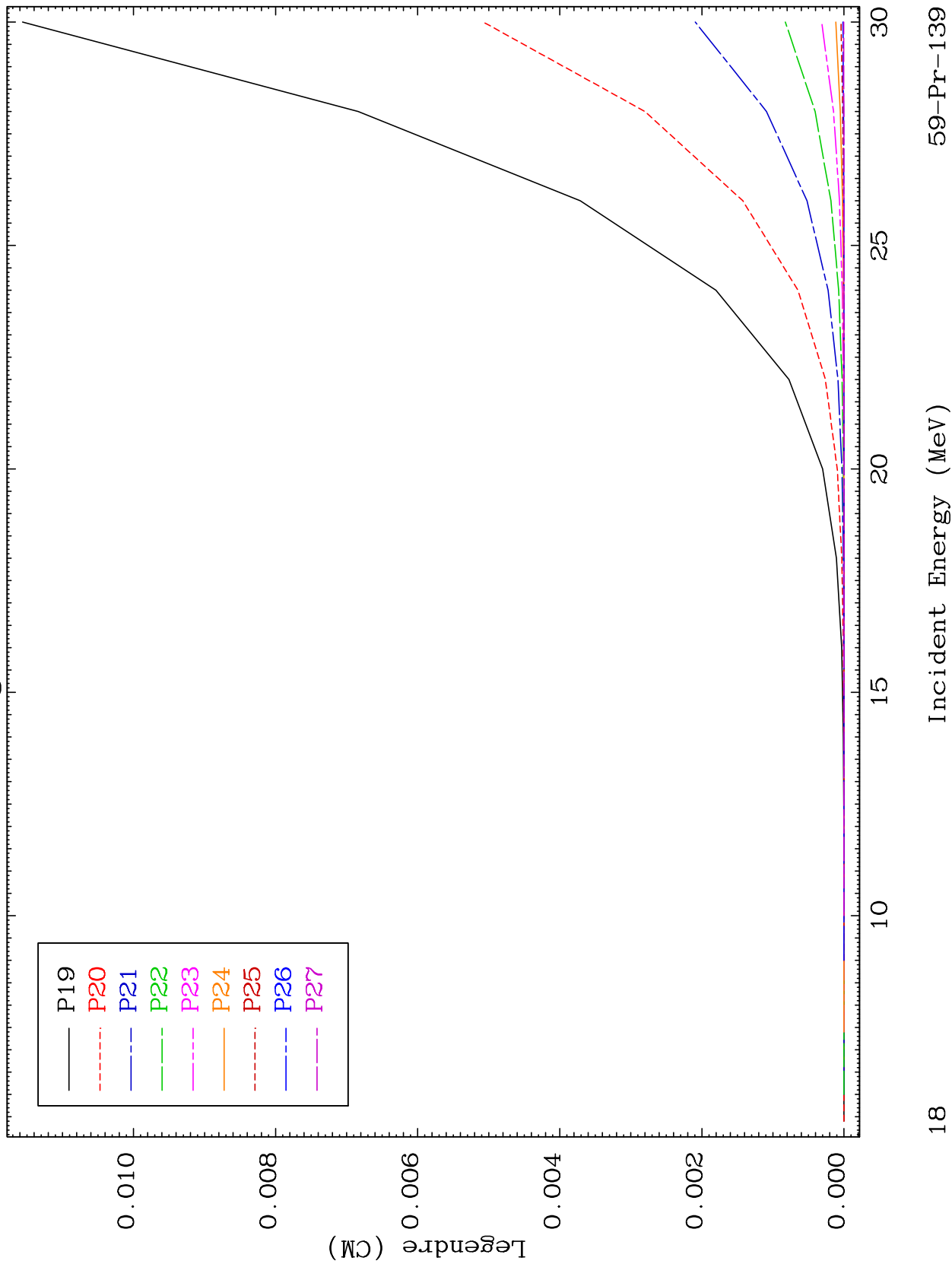
Incident Energy (MeV)

59-Pr-139

MAT 5919

Elastic Legendre Coefficients

59-Pr-139



18

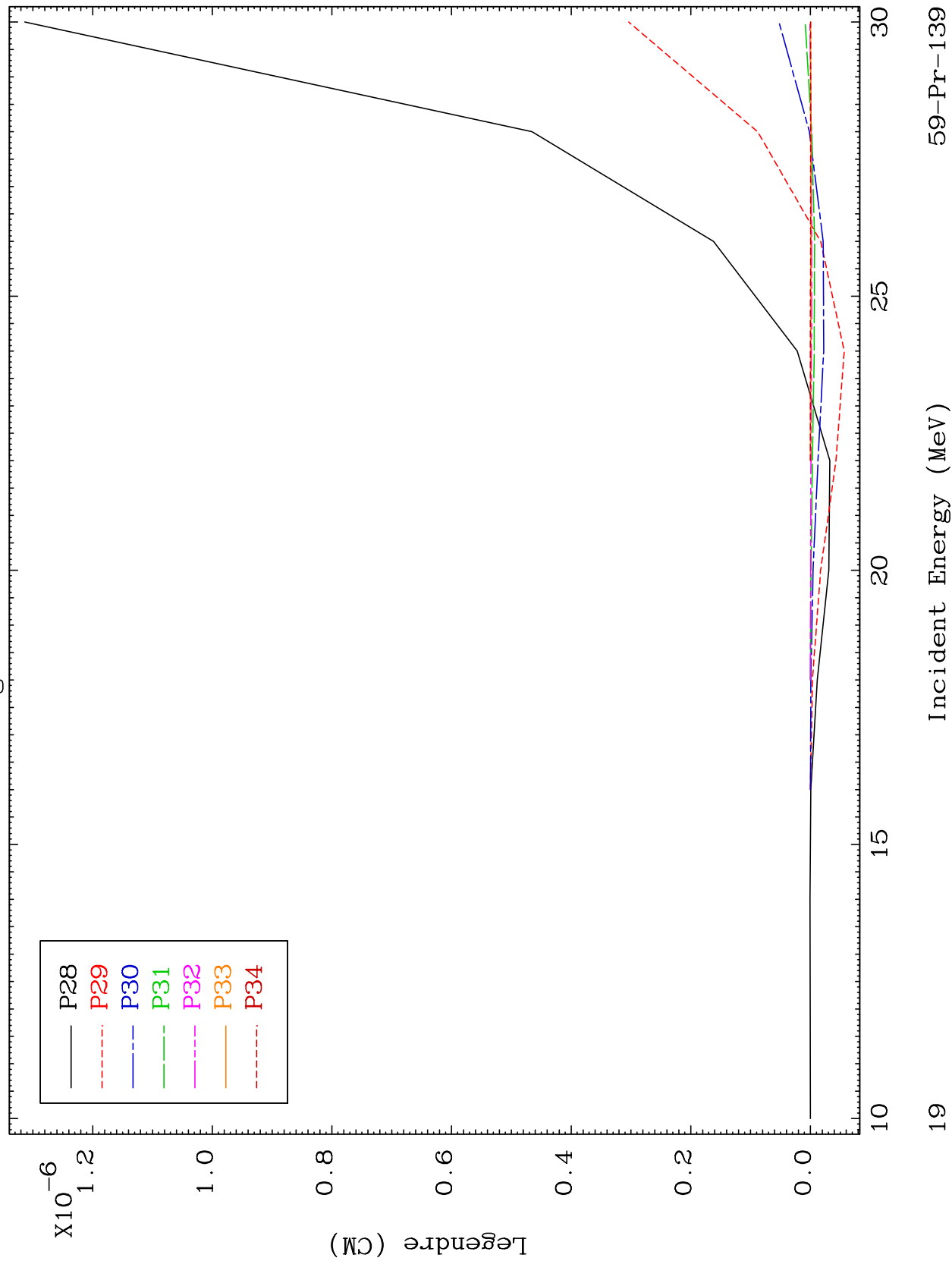
Incident Energy (MeV)

59-Pr-139

MAT 5919

Elastic Legendre Coefficients

59-Pr-139



19

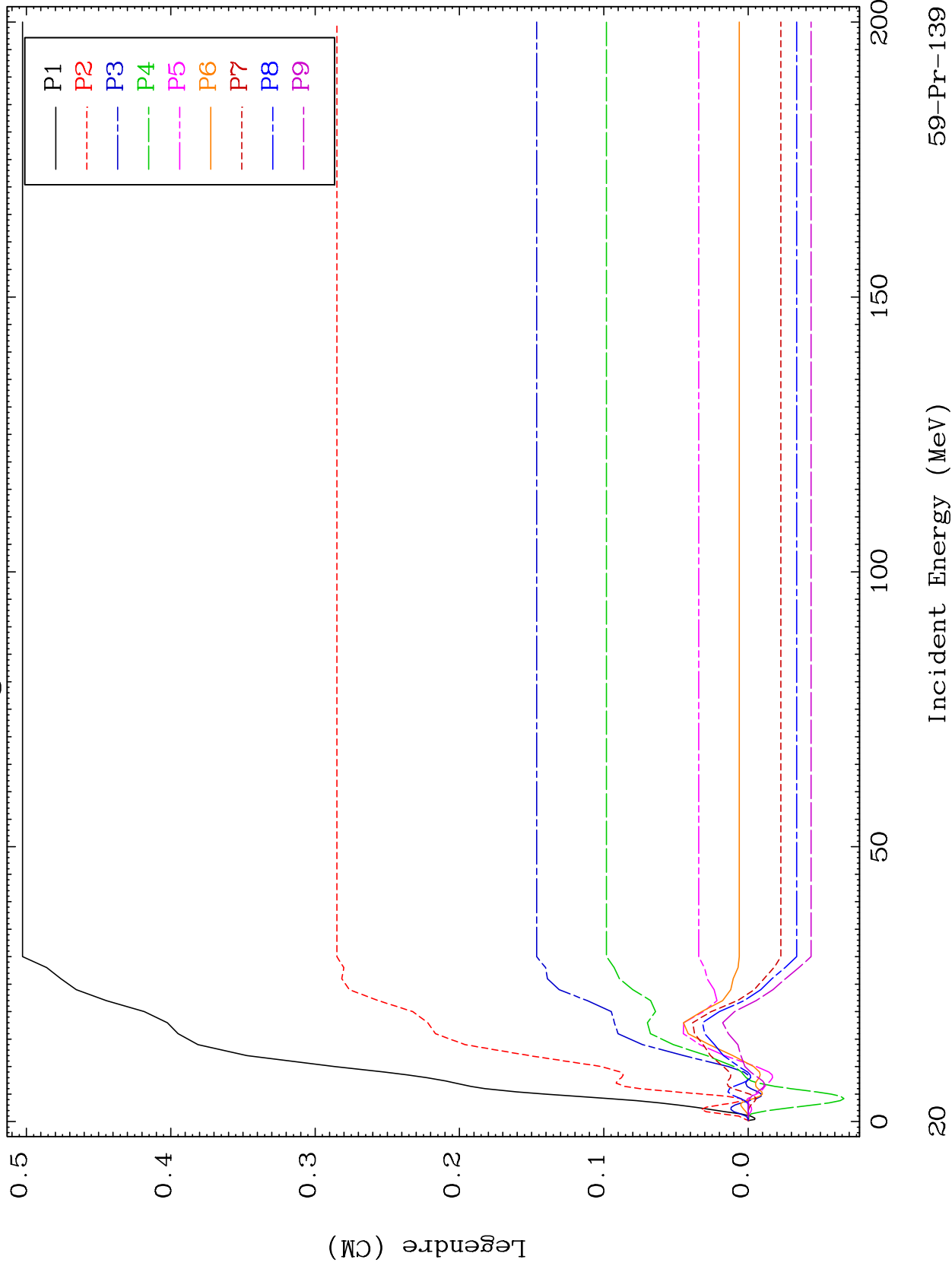
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 51 (n,n') Level
Legendre Coefficients

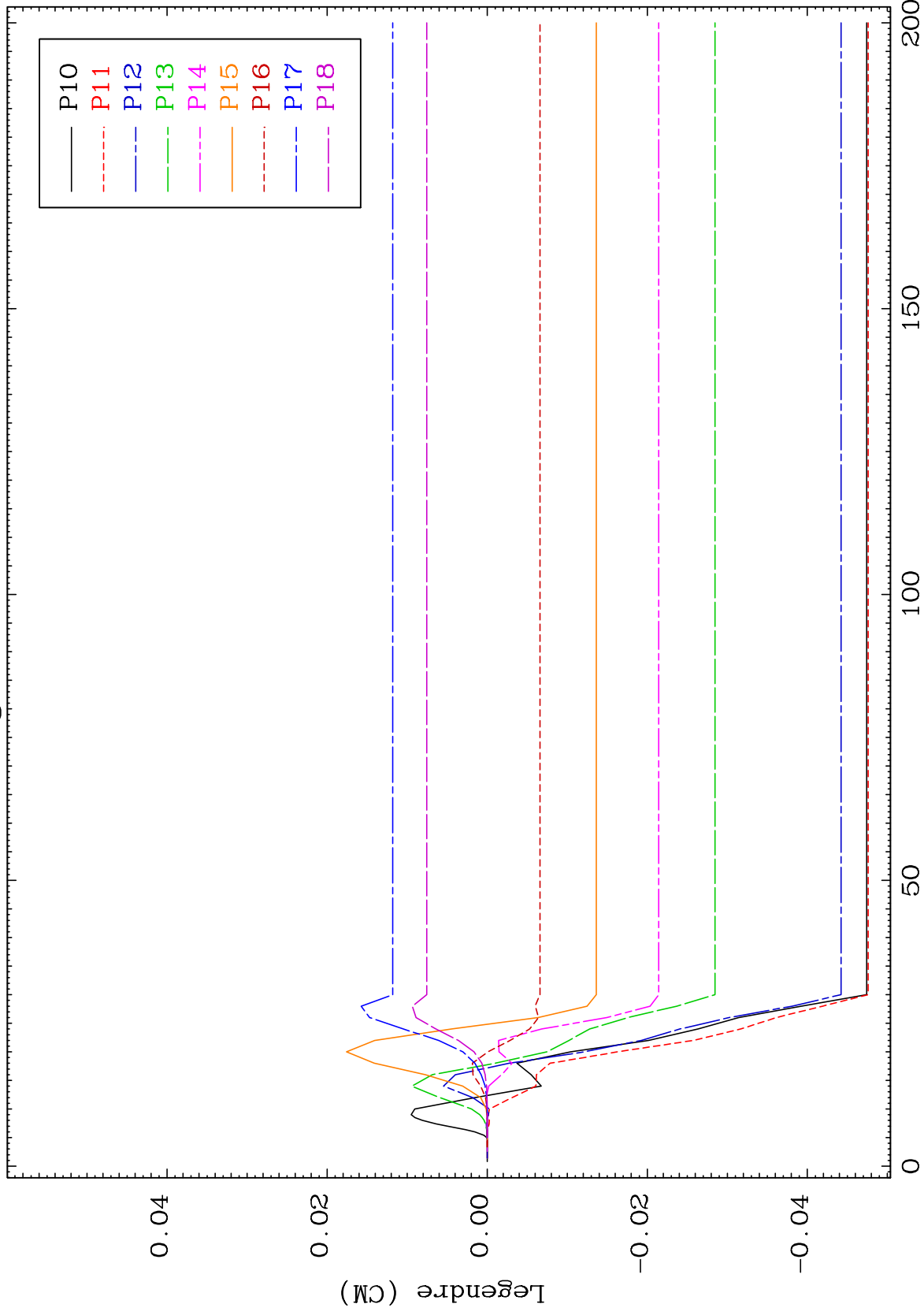
59-Pr-139



MAT 5919

MT= 51 (n,n') Level
Legendre Coefficients

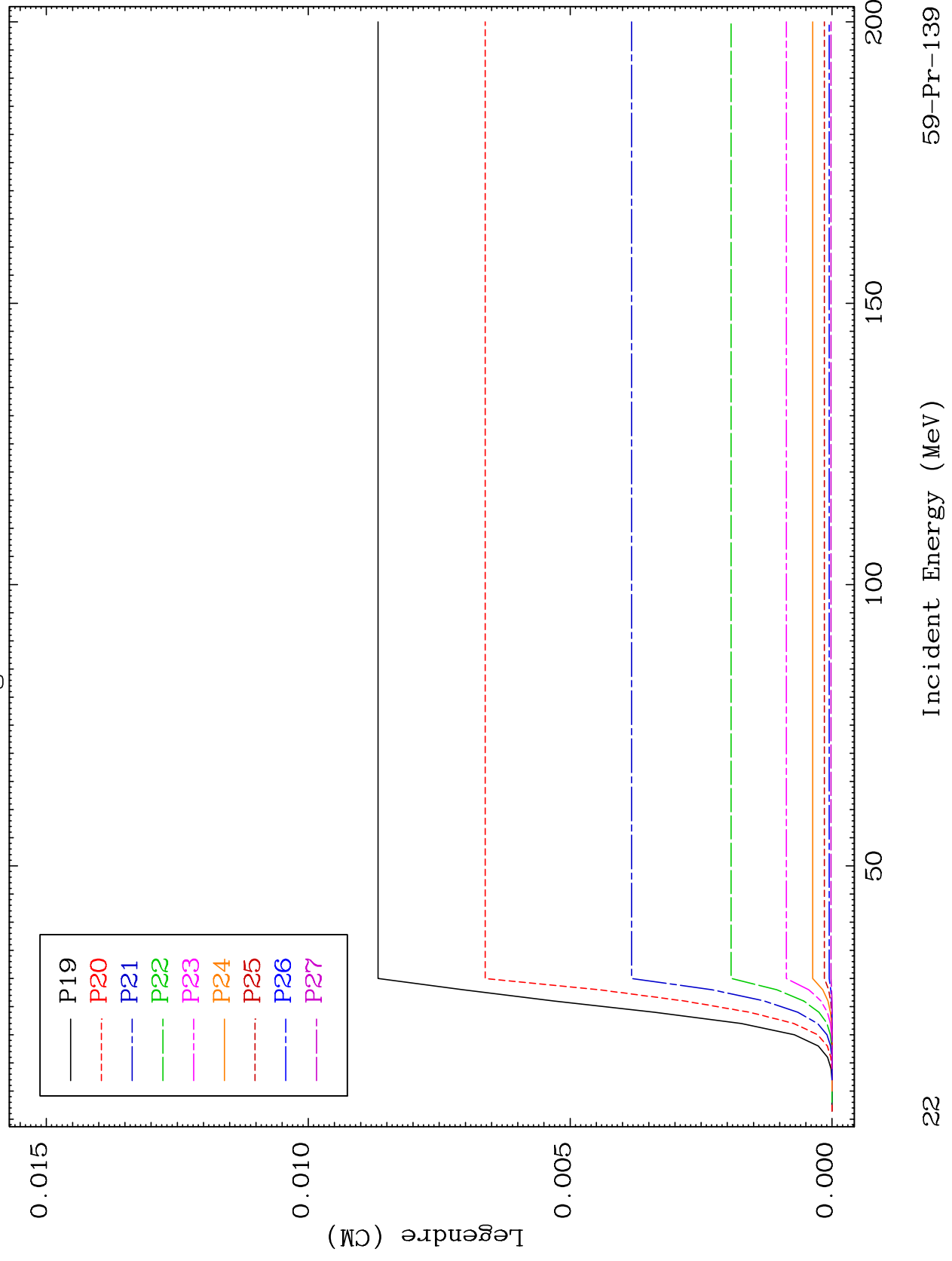
59-Pr-139



21

Incident Energy (MeV)

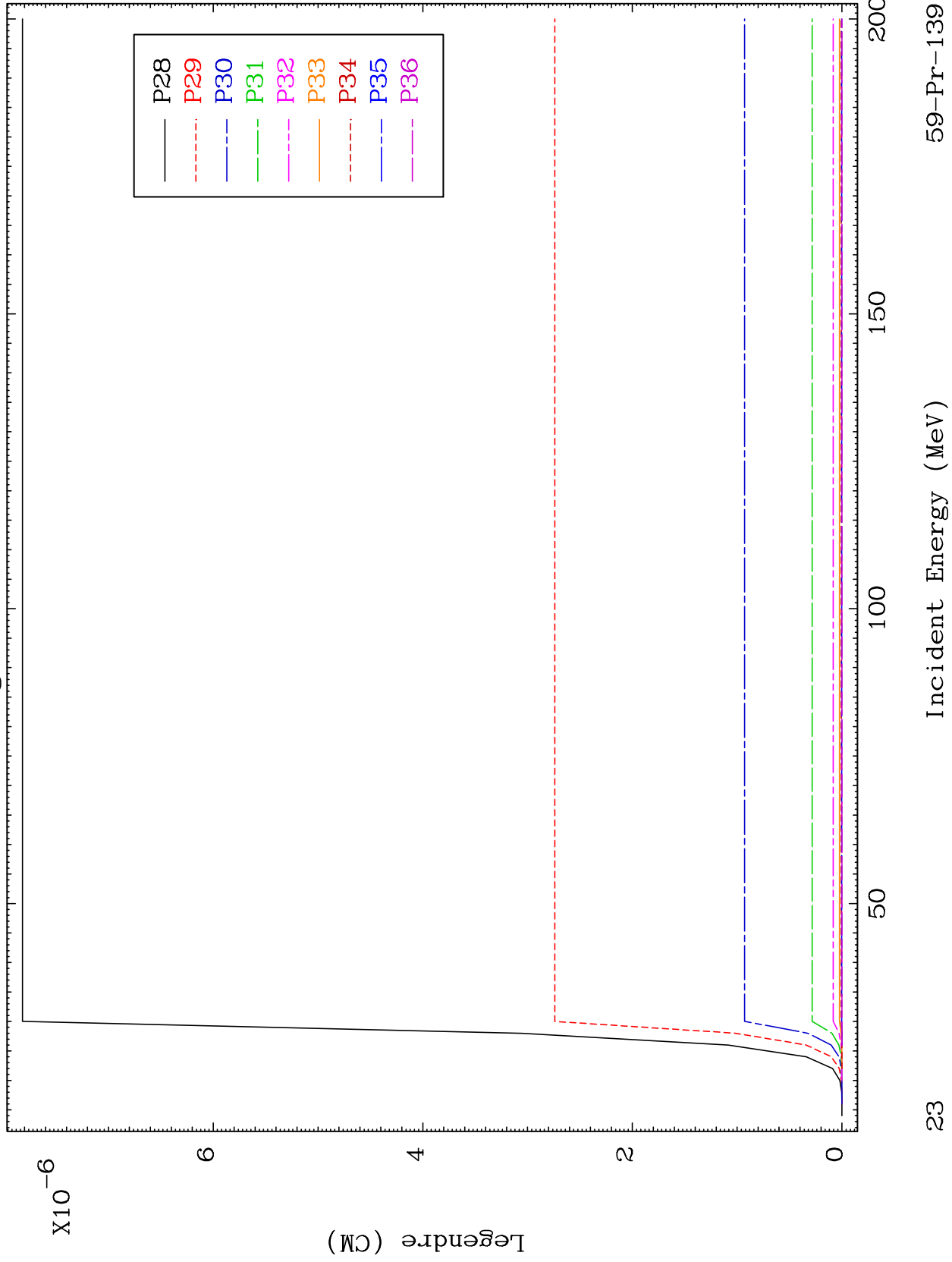
59-Pr-139



MAT 5919

MT= 51 (n,n') Level
Legendre Coefficients

59-Pr-139

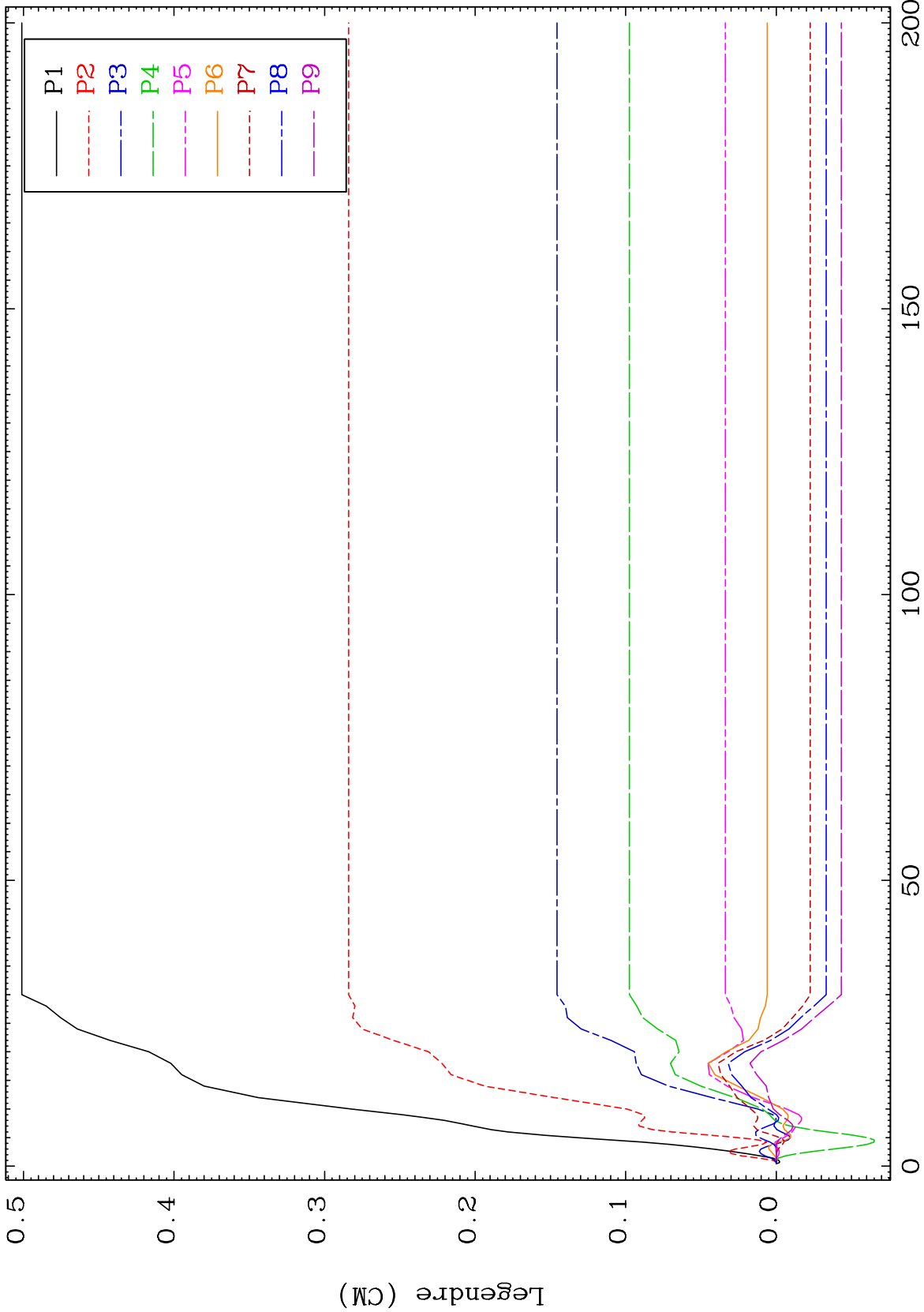


MAT 5919

MT= 52 (n,n') Level

59-Pr-139

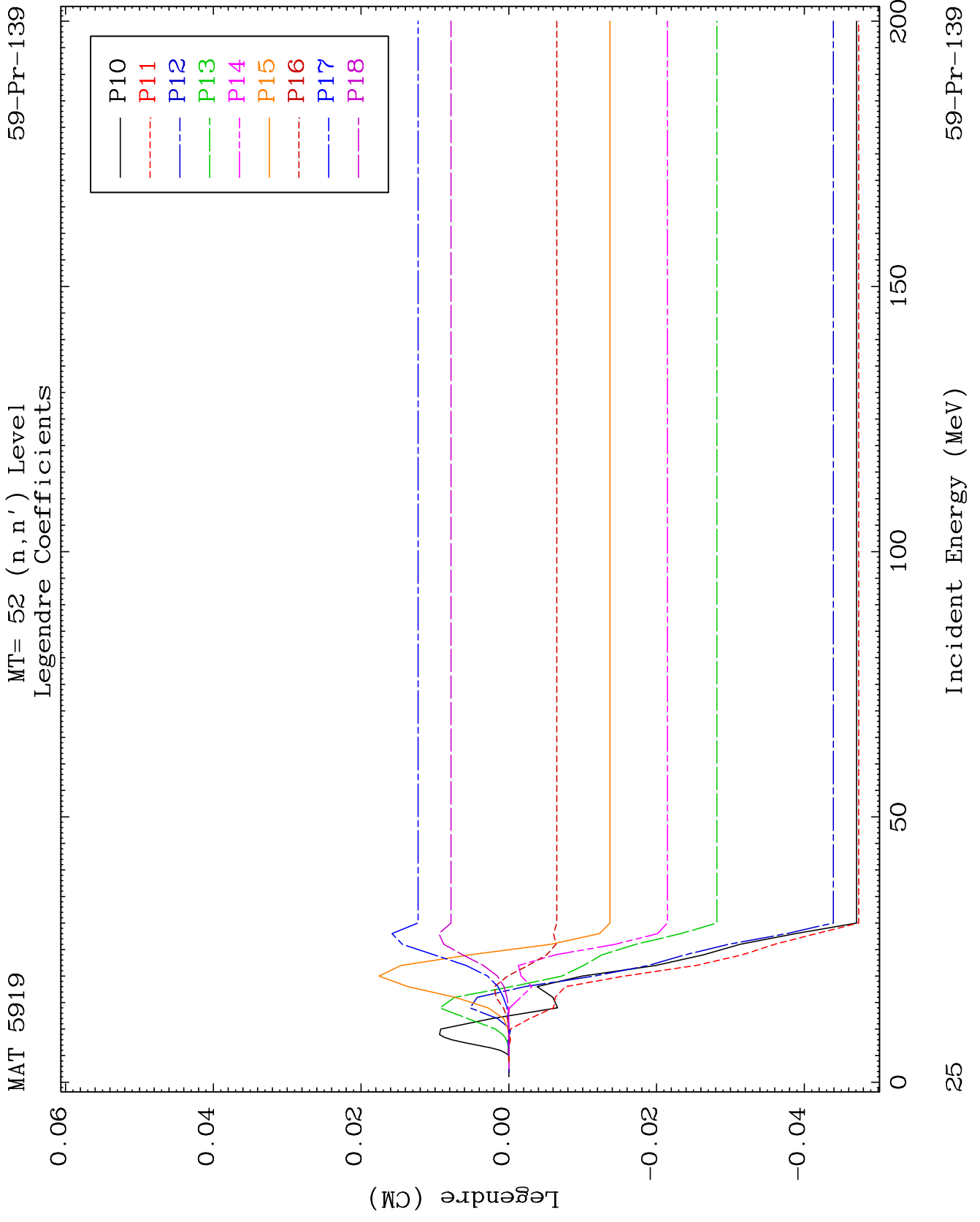
Legendre Coefficients

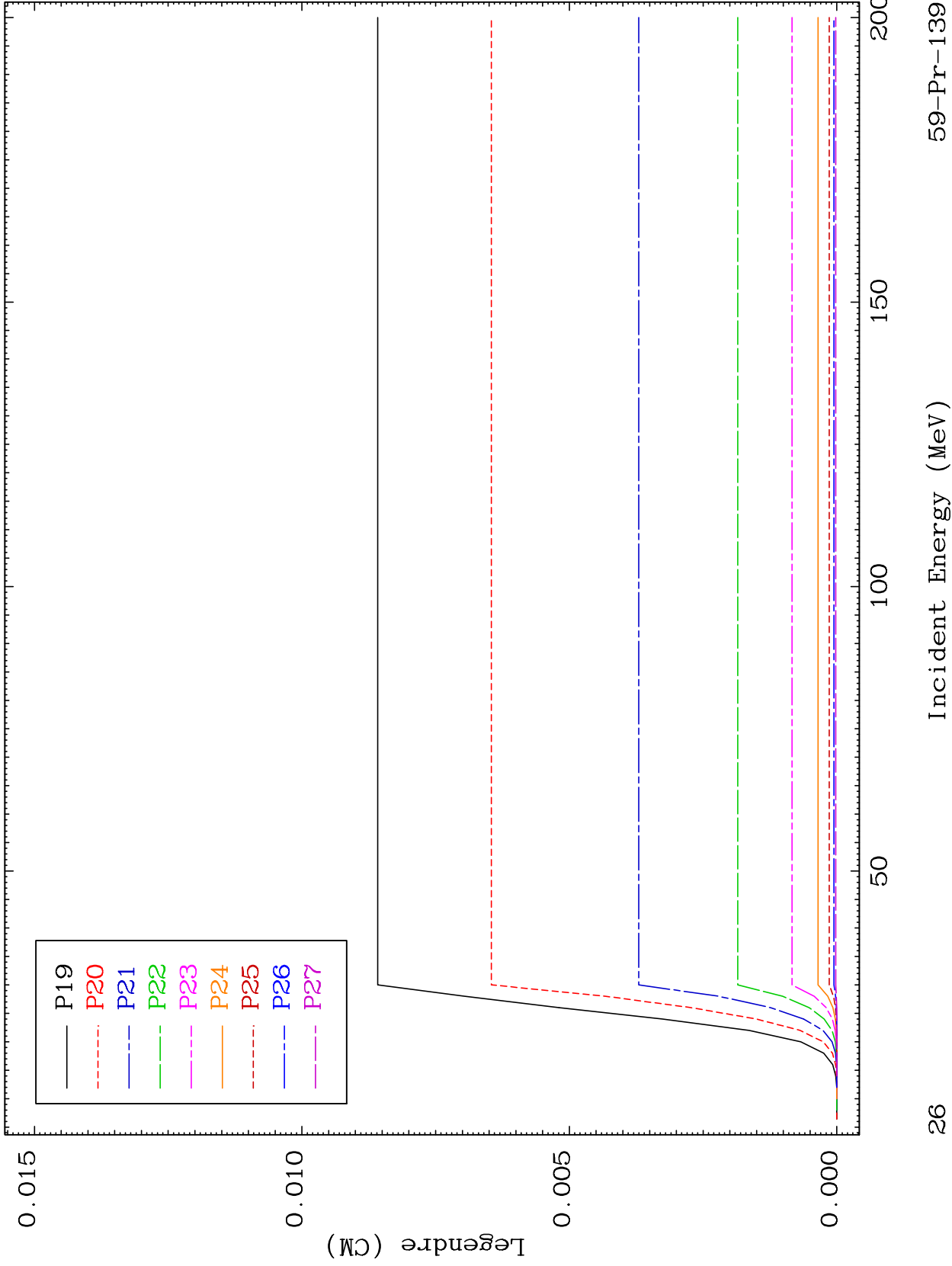


24

Incident Energy (MeV)

59-Pr-139

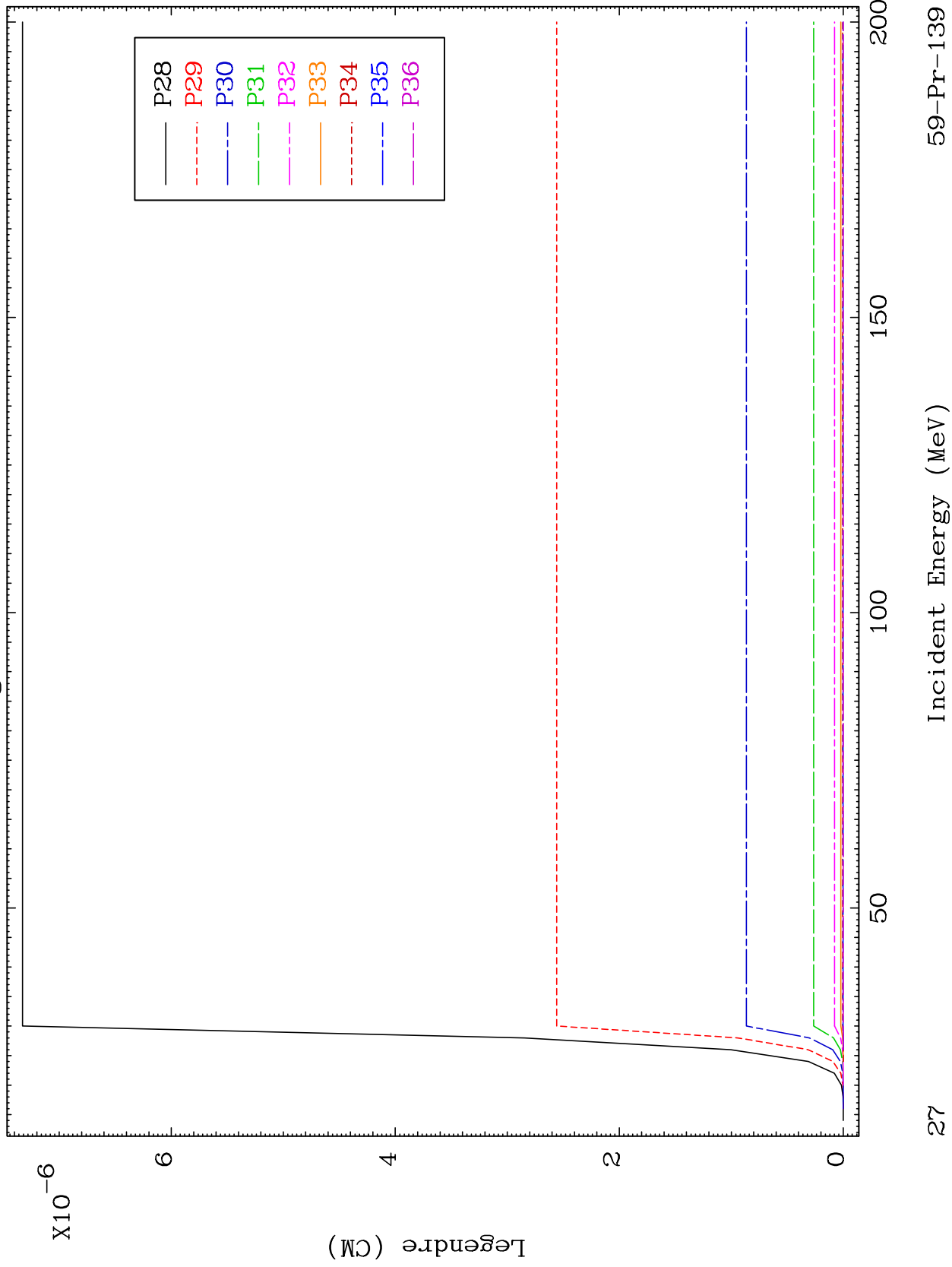




MAT 5919

MT= 52 (n,n') Level
Legendre Coefficients

59-Pr-139

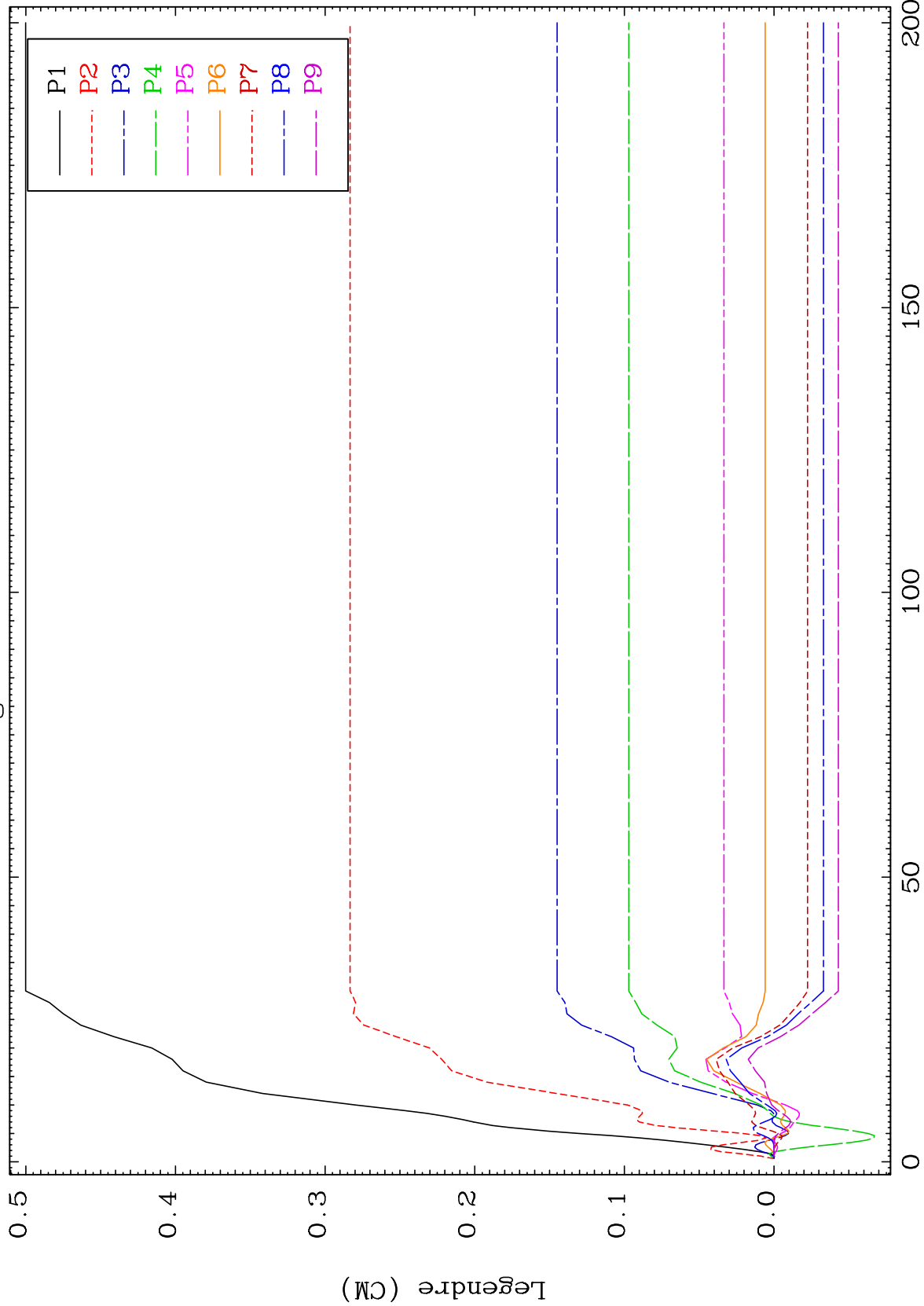


MAT 5919

MT= 53 (n,n') Level

59-Pr-139

Legendre Coefficients



28

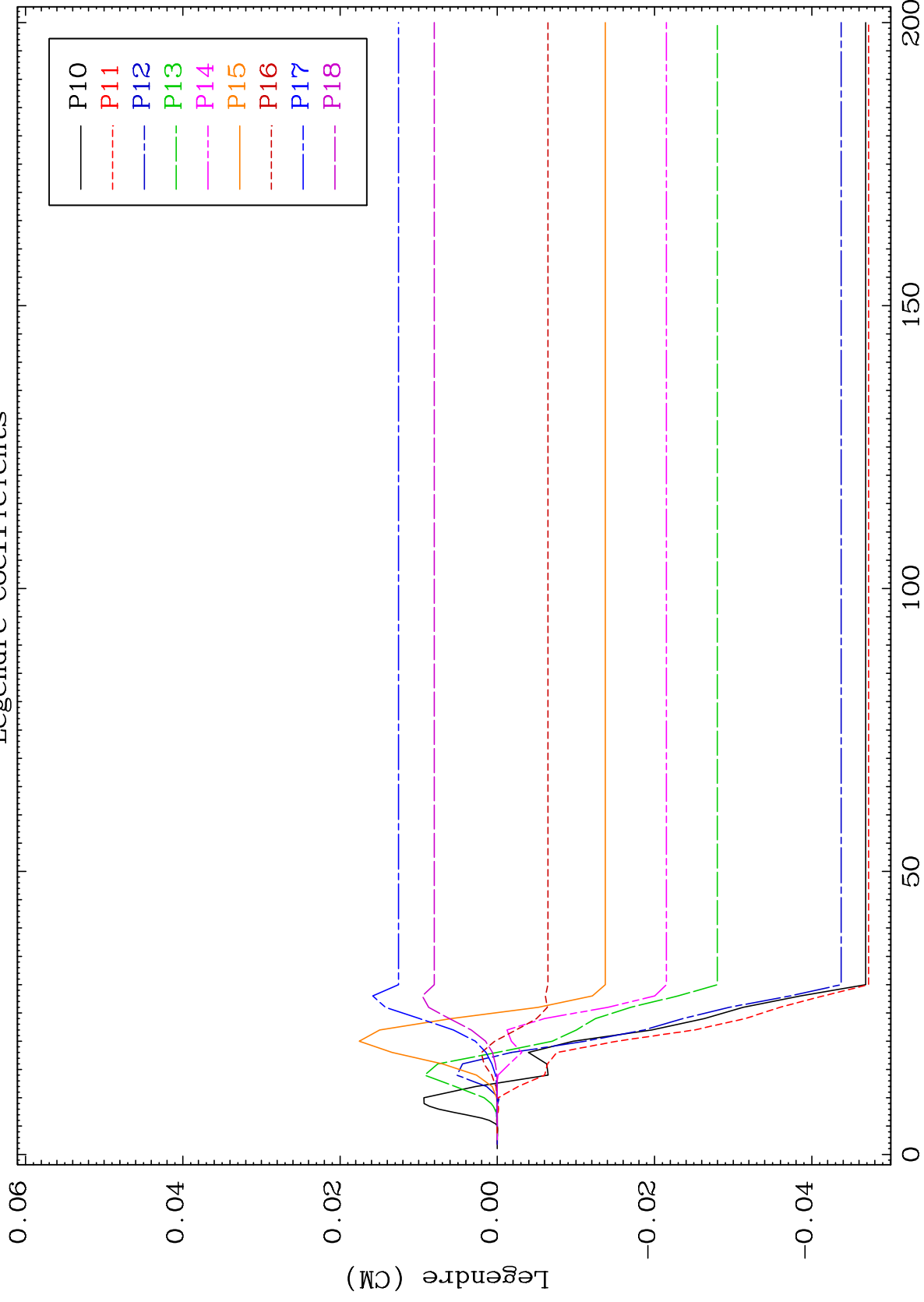
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 53 (n,n') Level
Legendre Coefficients

59-Pr-139



29

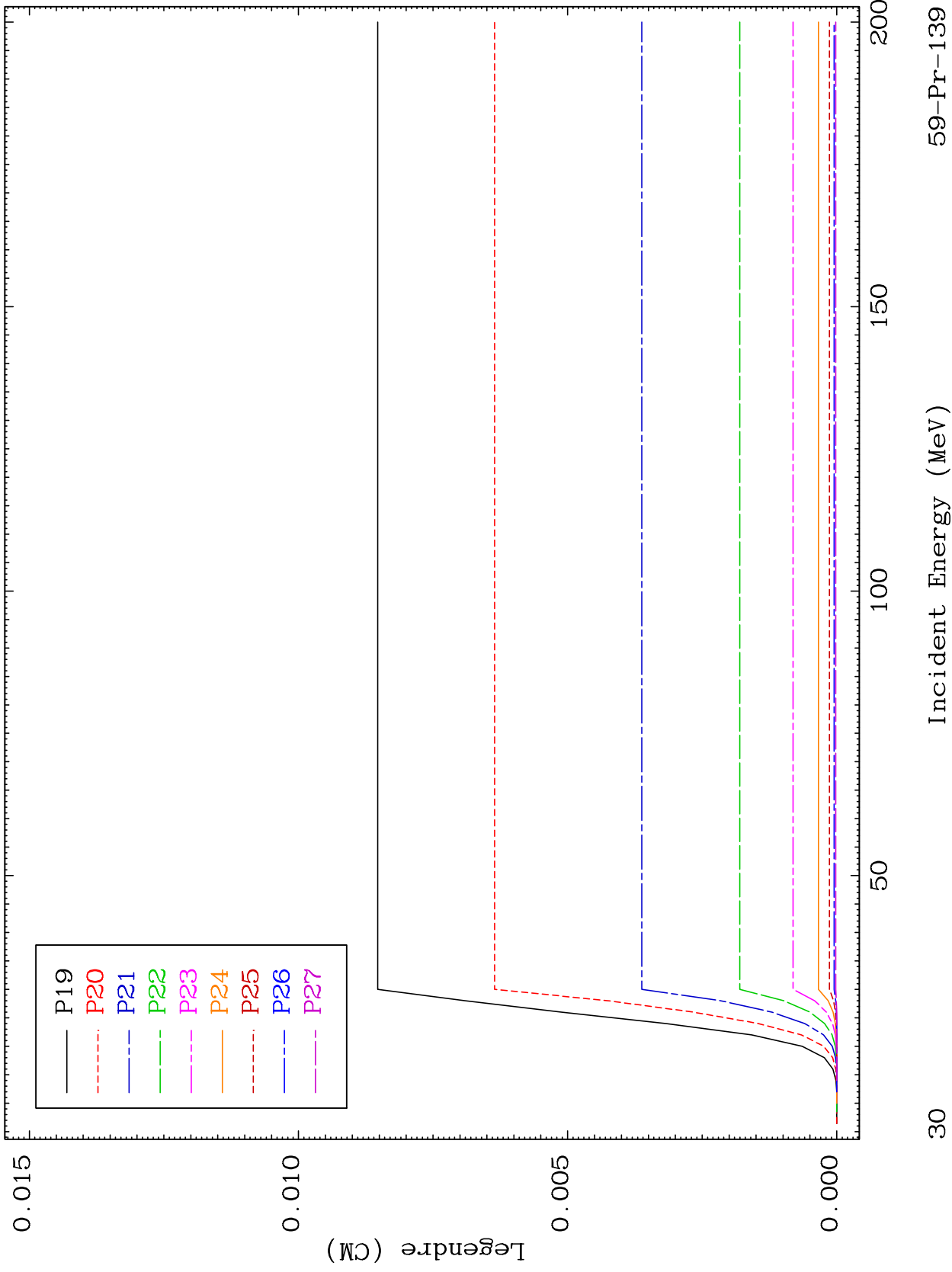
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 53 (n,n') Level
Legendre Coefficients

59-Pr-139



30

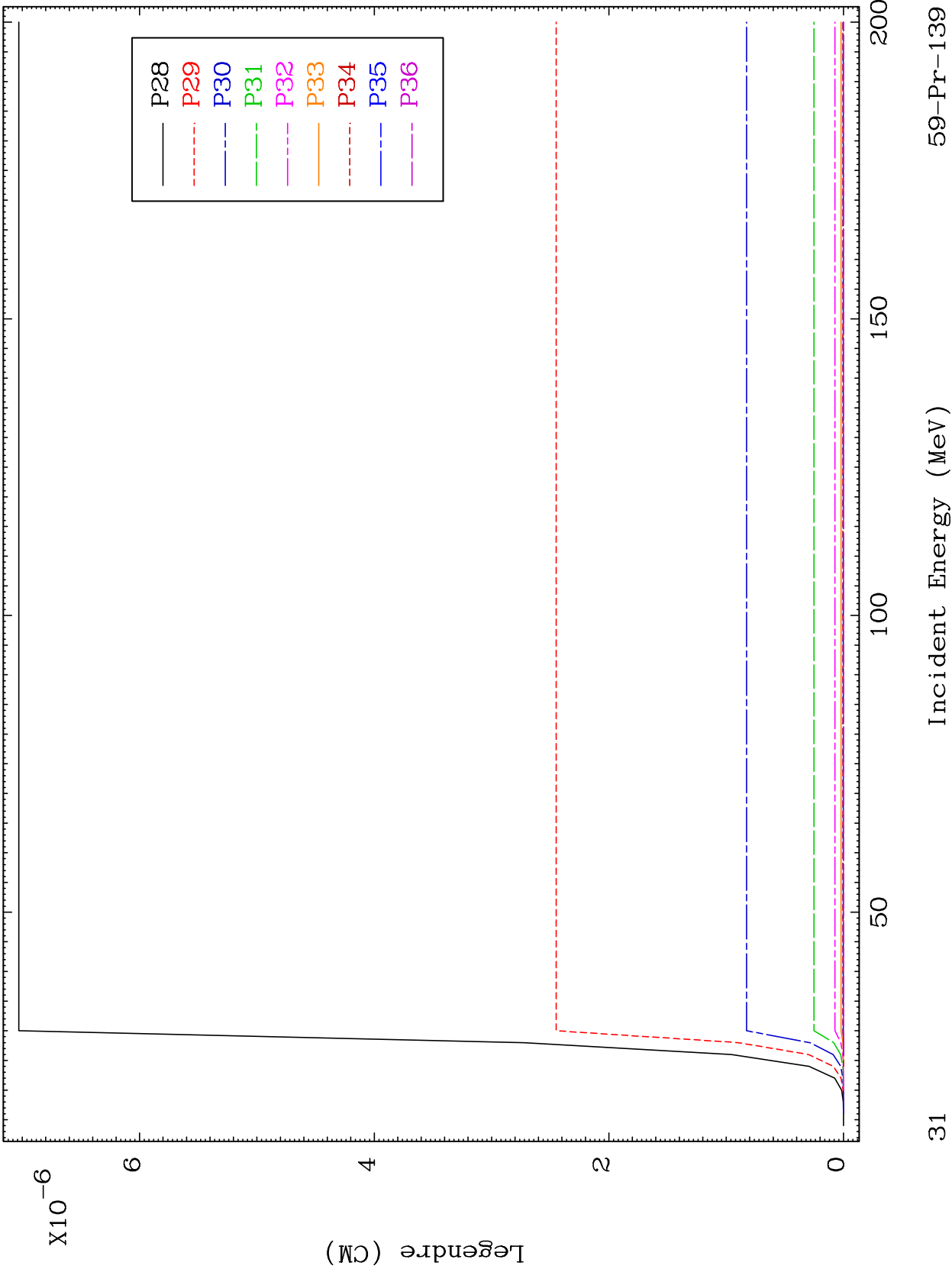
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 53 (n,n') Level
Legendre Coefficients

59-Pr-139



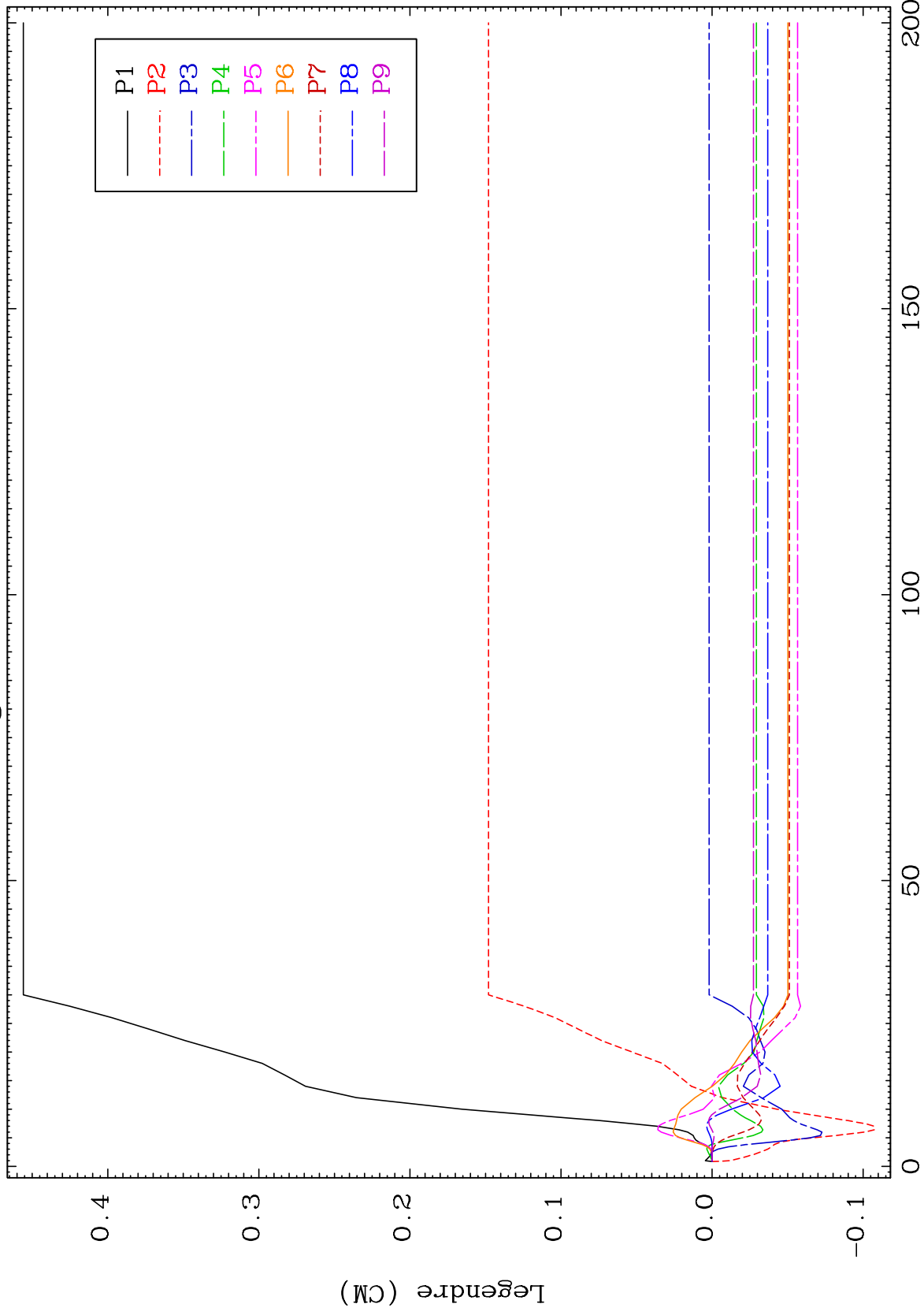
31

59-Pr-139

MAT 5919

MT= 54 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

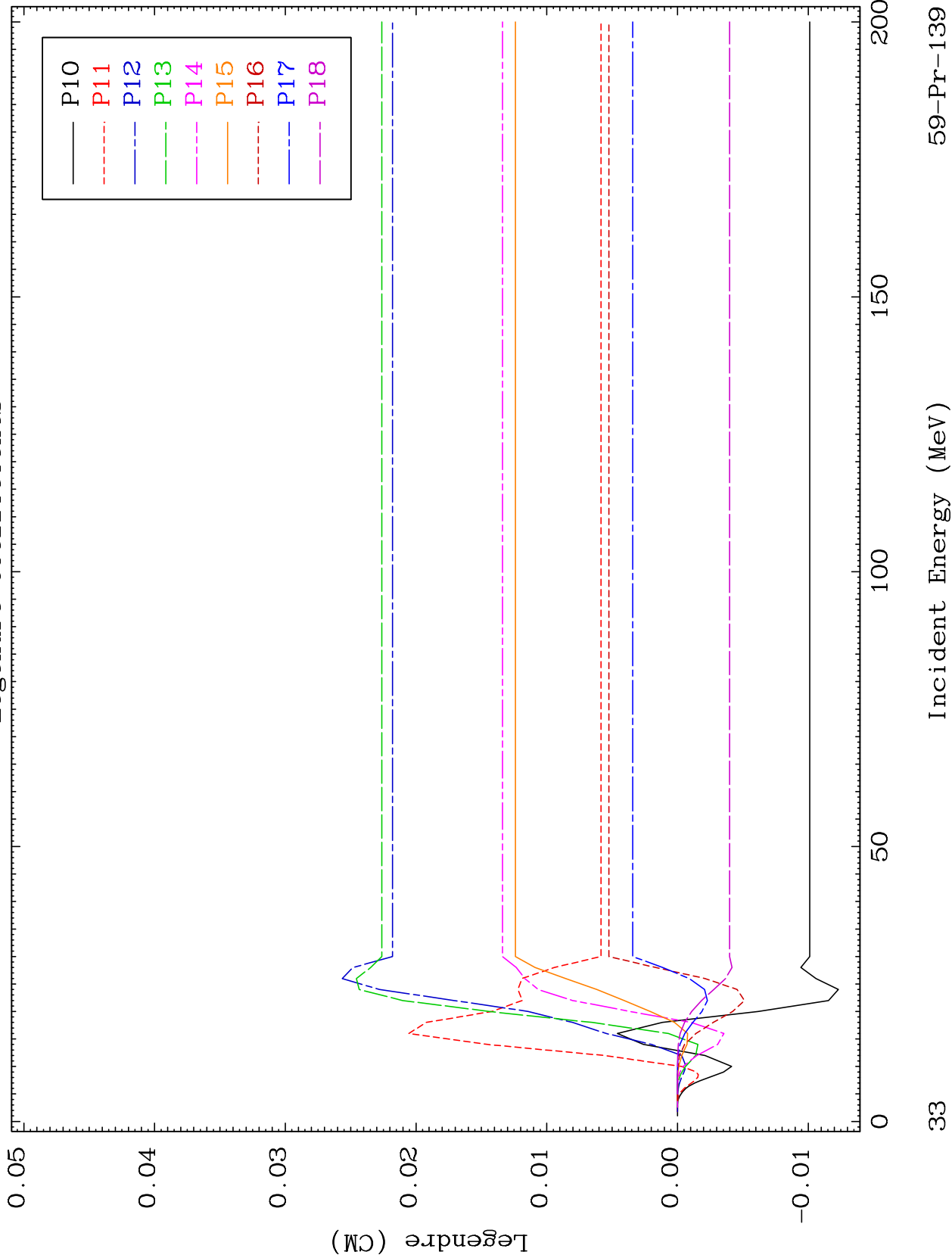
Incident Energy (MeV)

32

MAT 5919

MT= 54 (n,n') Level
Legendre Coefficients

59-Pr-139



33

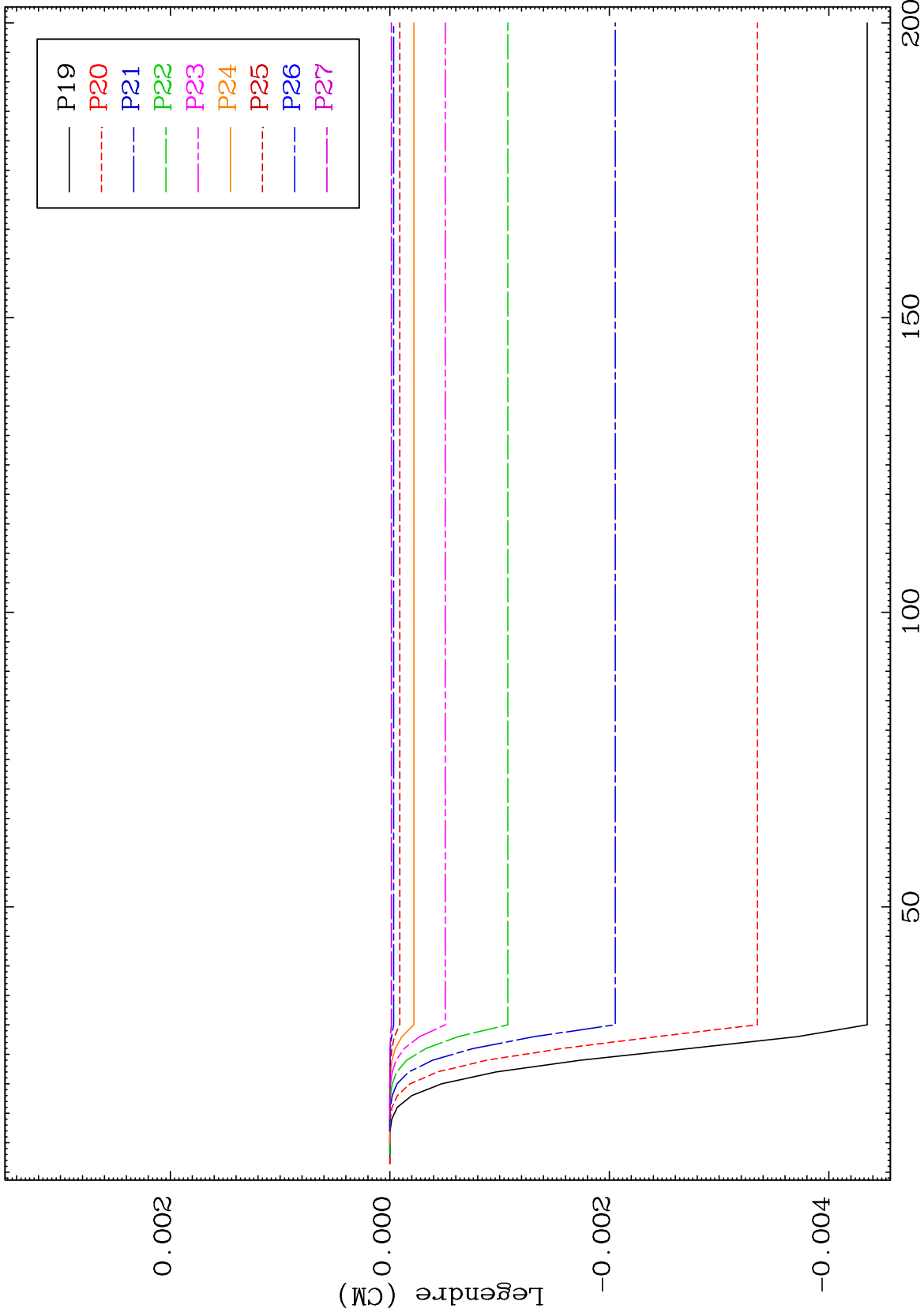
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 54 (n,n') Level
Legendre Coefficients

59-Pr-139



34

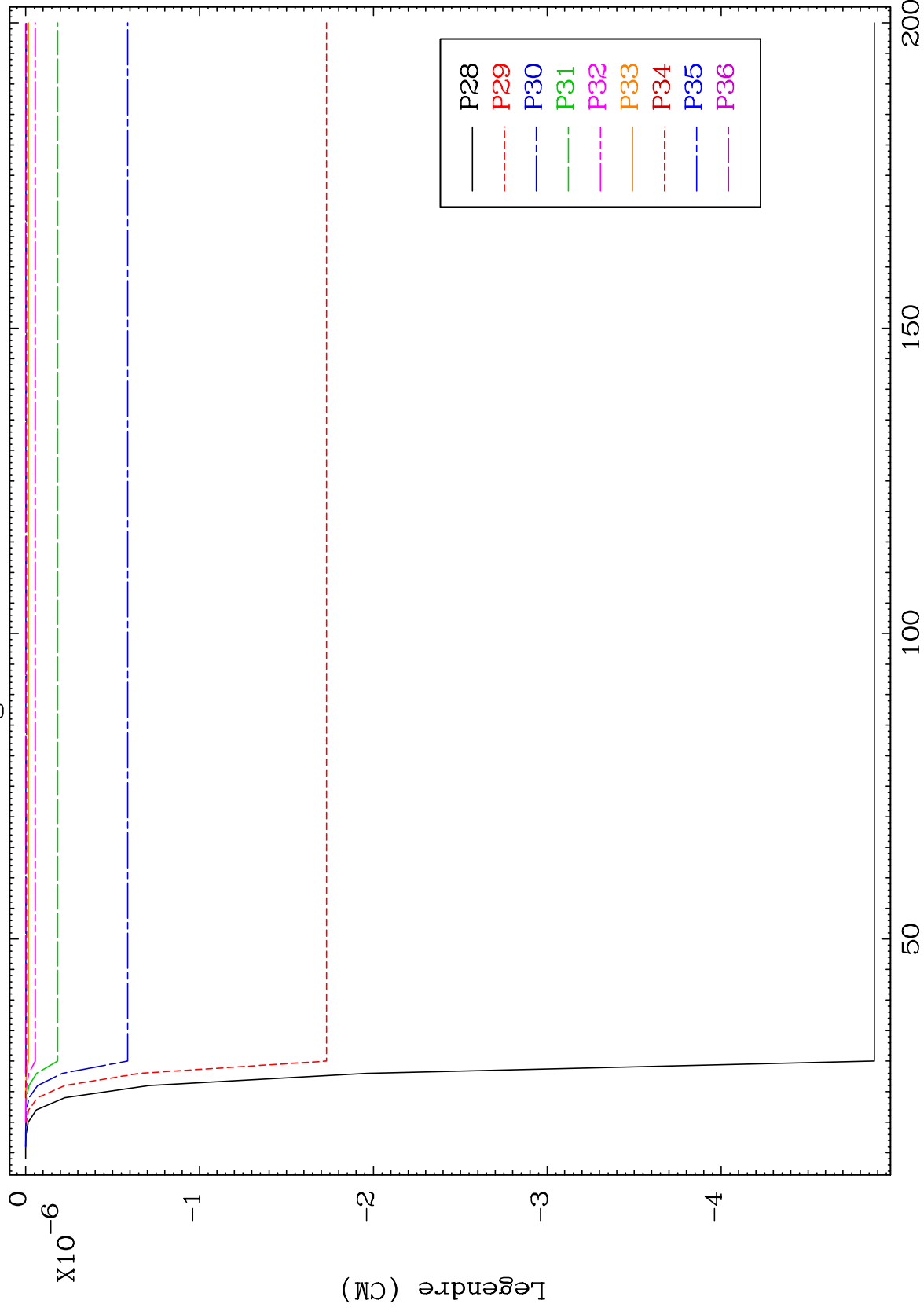
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 54 (n,n') Level
Legendre Coefficients

59-Pr-139



35

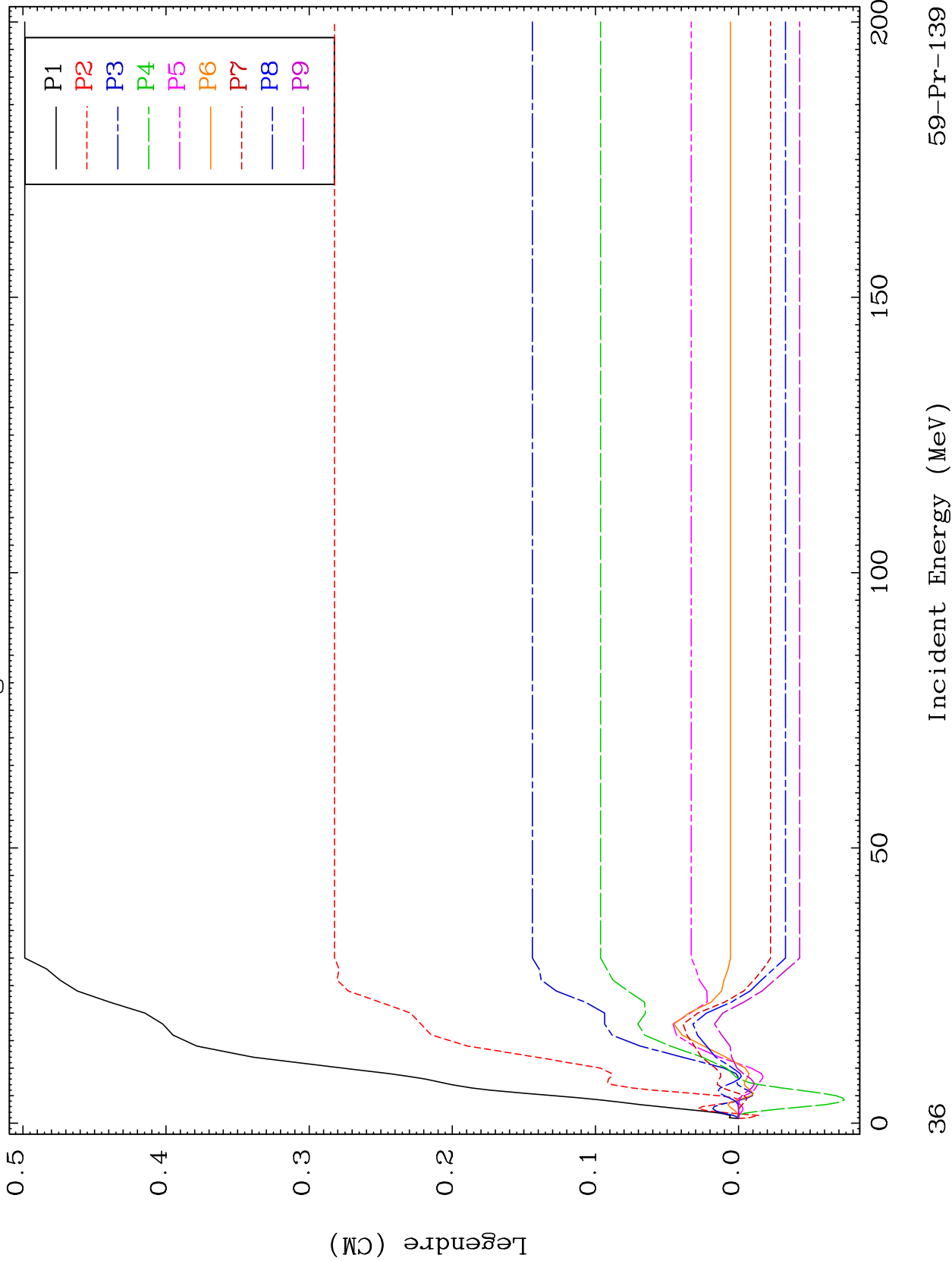
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 55 (n,n') Level
Legendre Coefficients

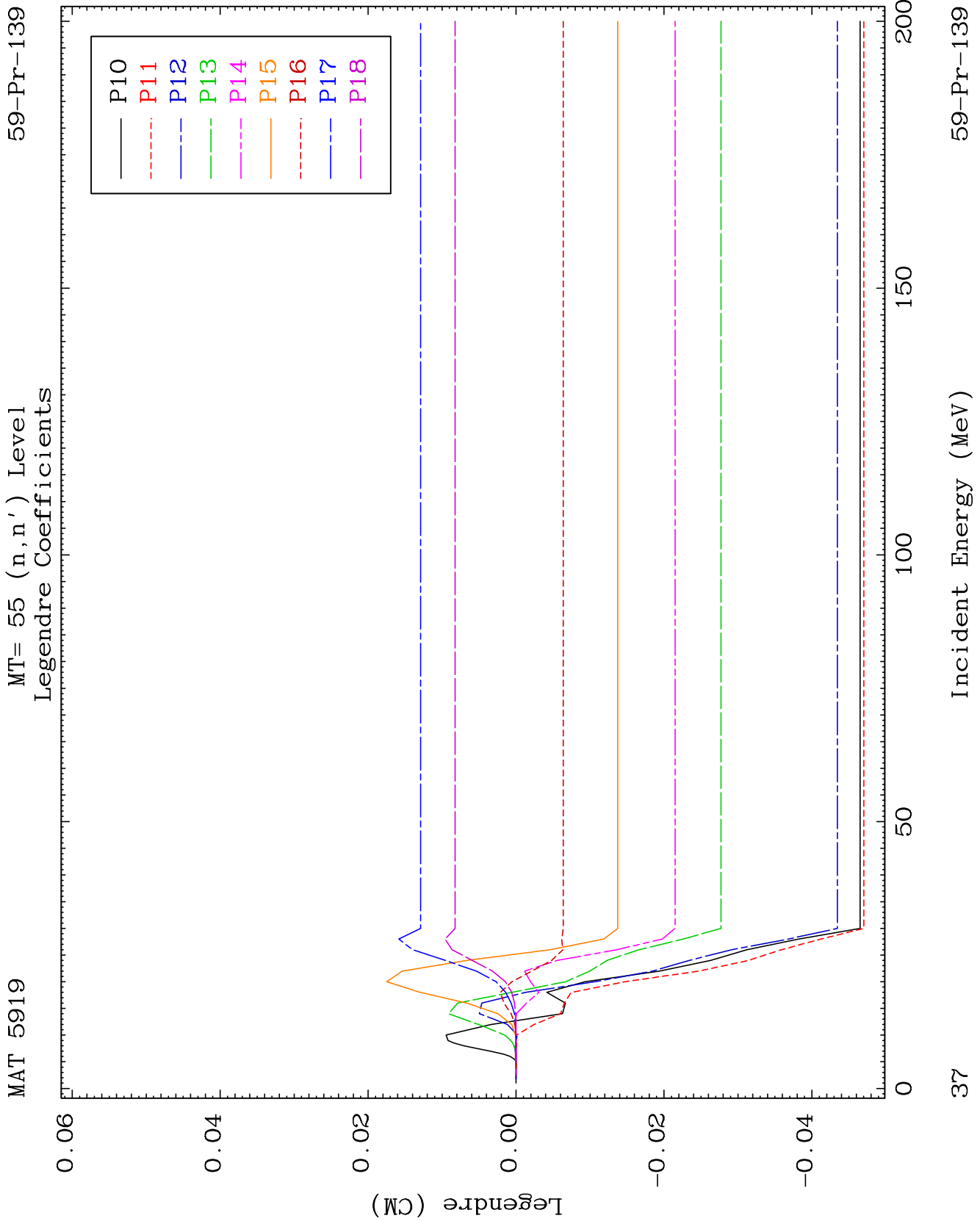
59-Pr-139

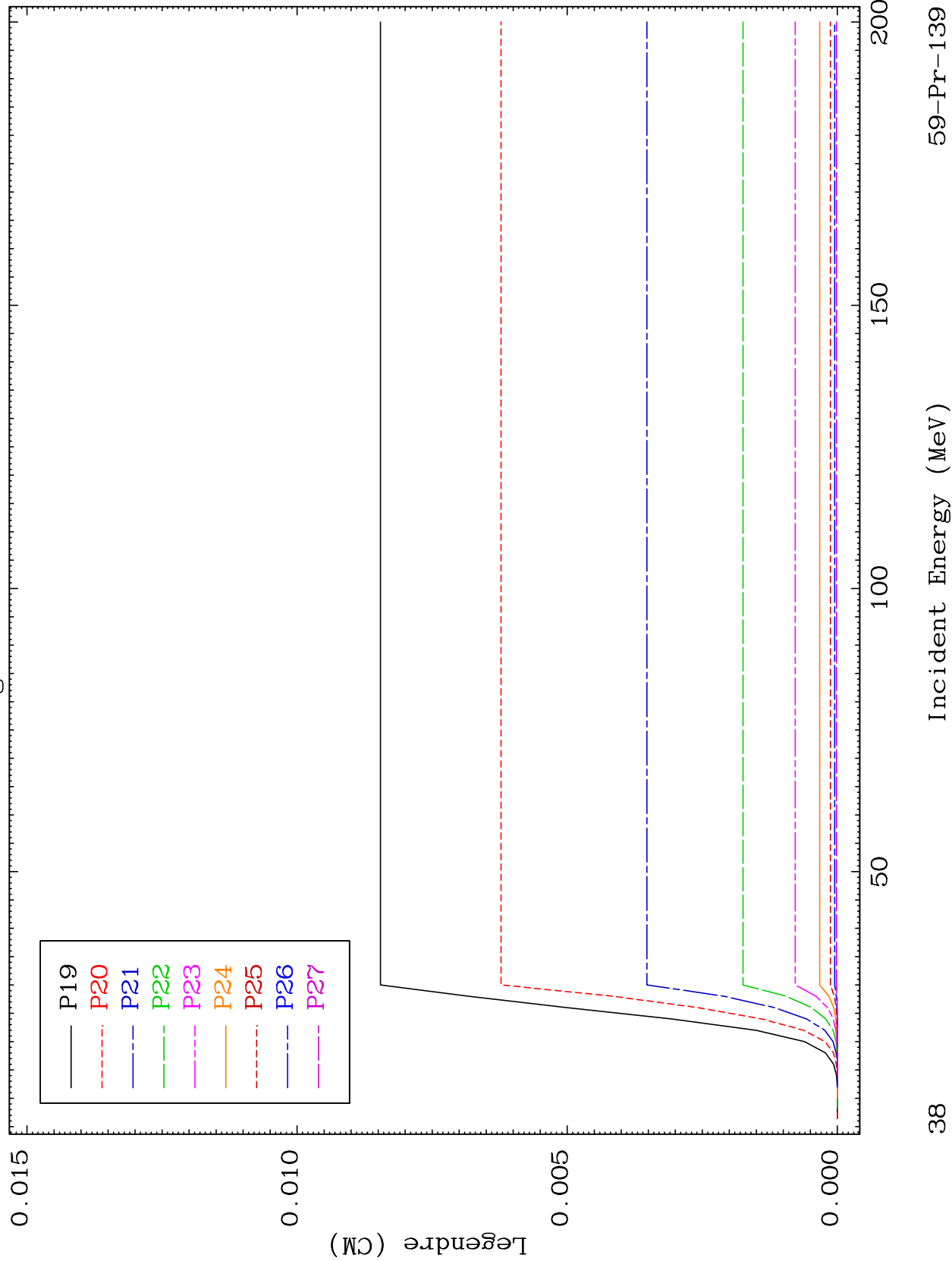


36

Incident Energy (MeV)

59-Pr-139

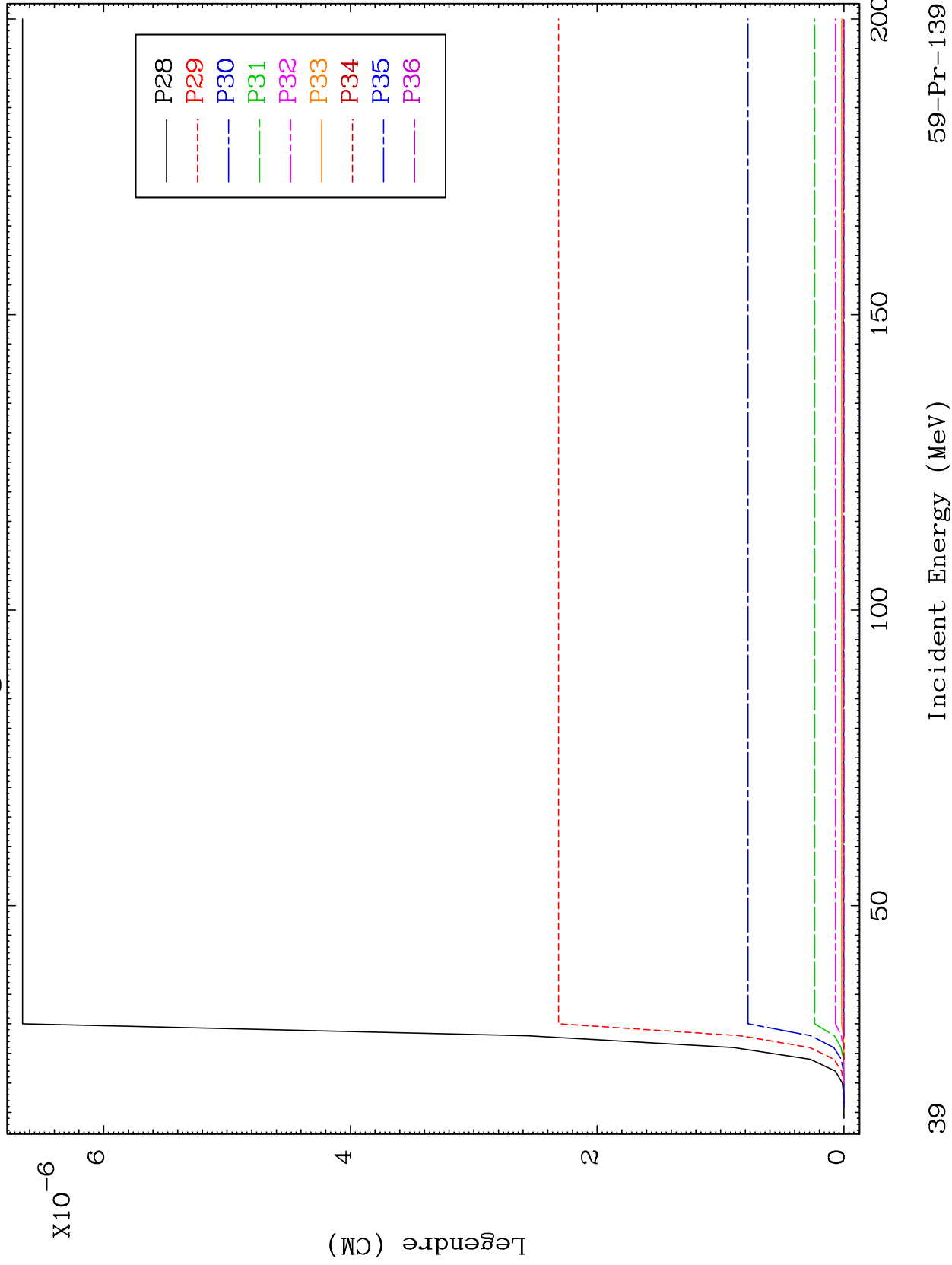




MAT 5919

MT= 55 (n,n') Level
Legendre Coefficients

59-Pr-139



39

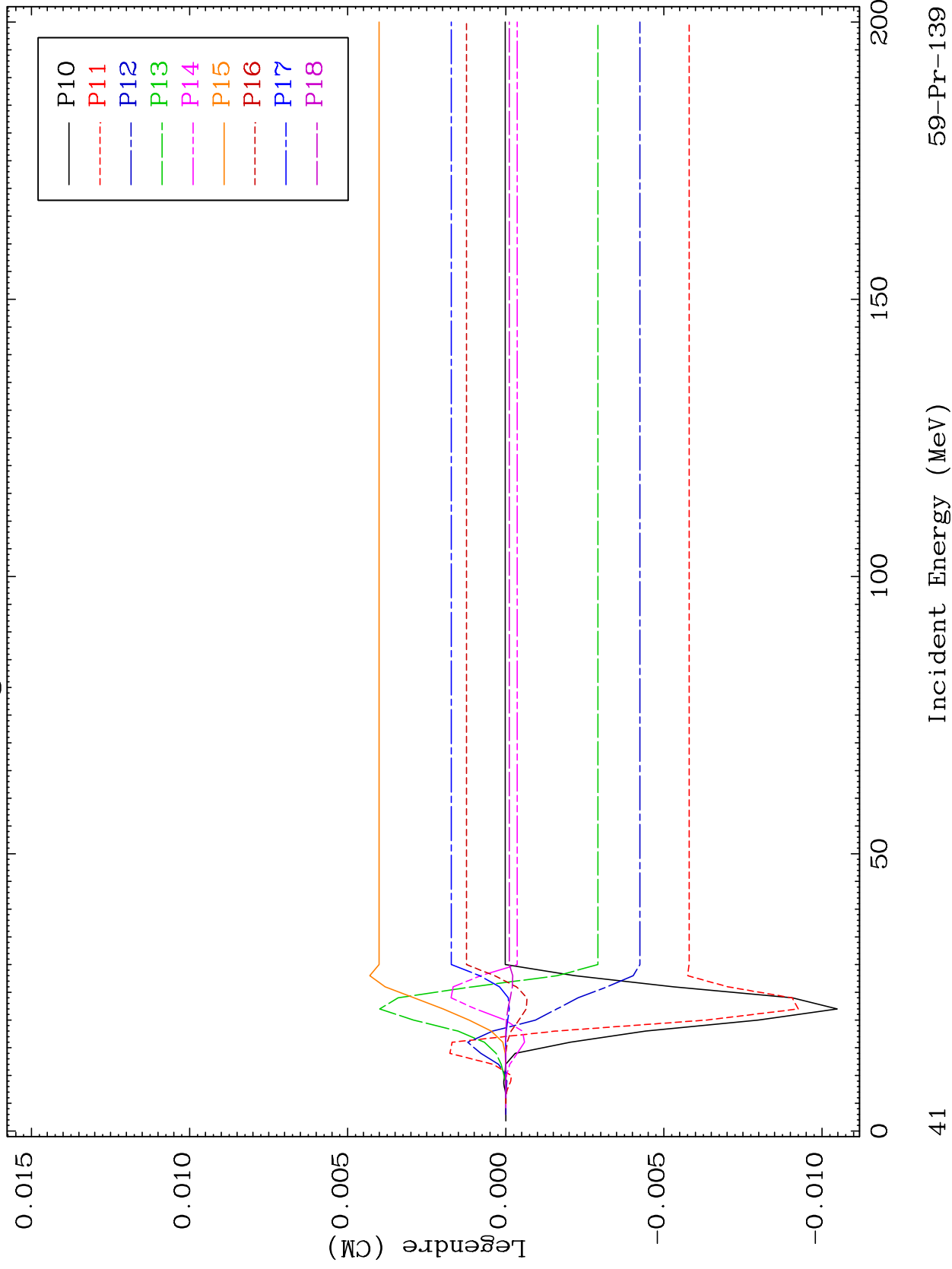
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 56 (n,n') Level
Legendre Coefficients

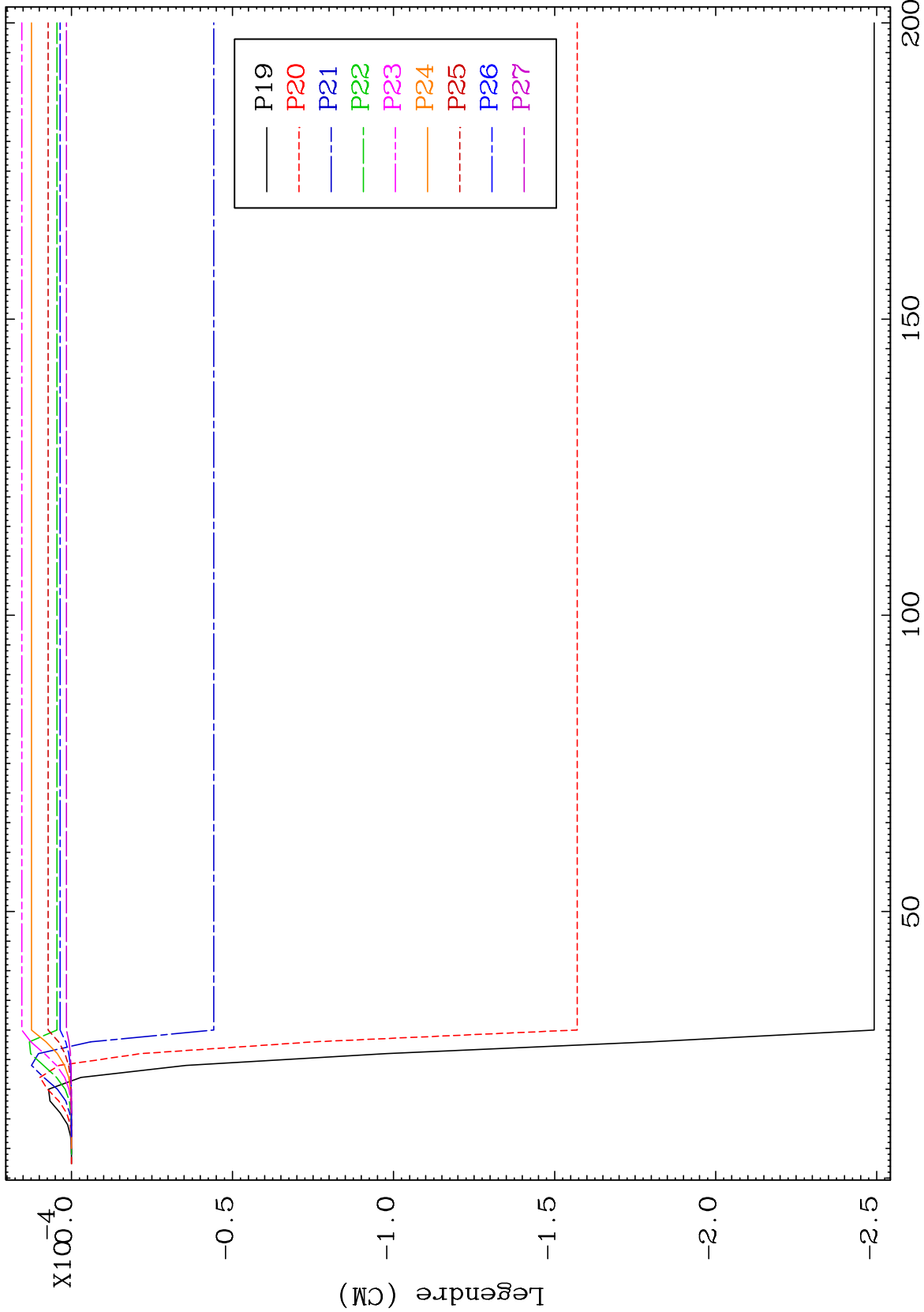
59-Pr-139



41

Incident Energy (MeV)

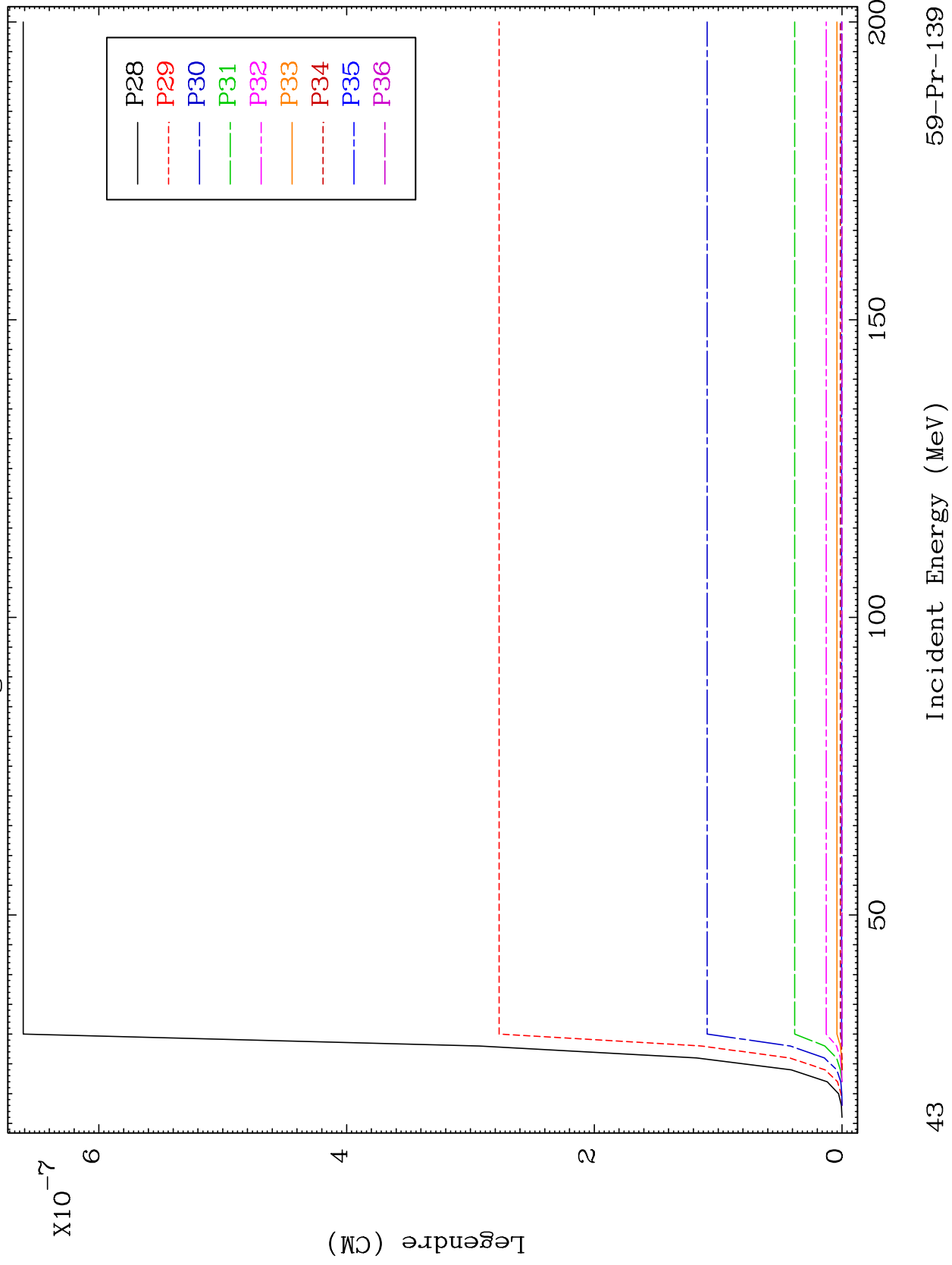
59-Pr-139



MAT 5919

MT= 56 (n,n') Level
Legendre Coefficients

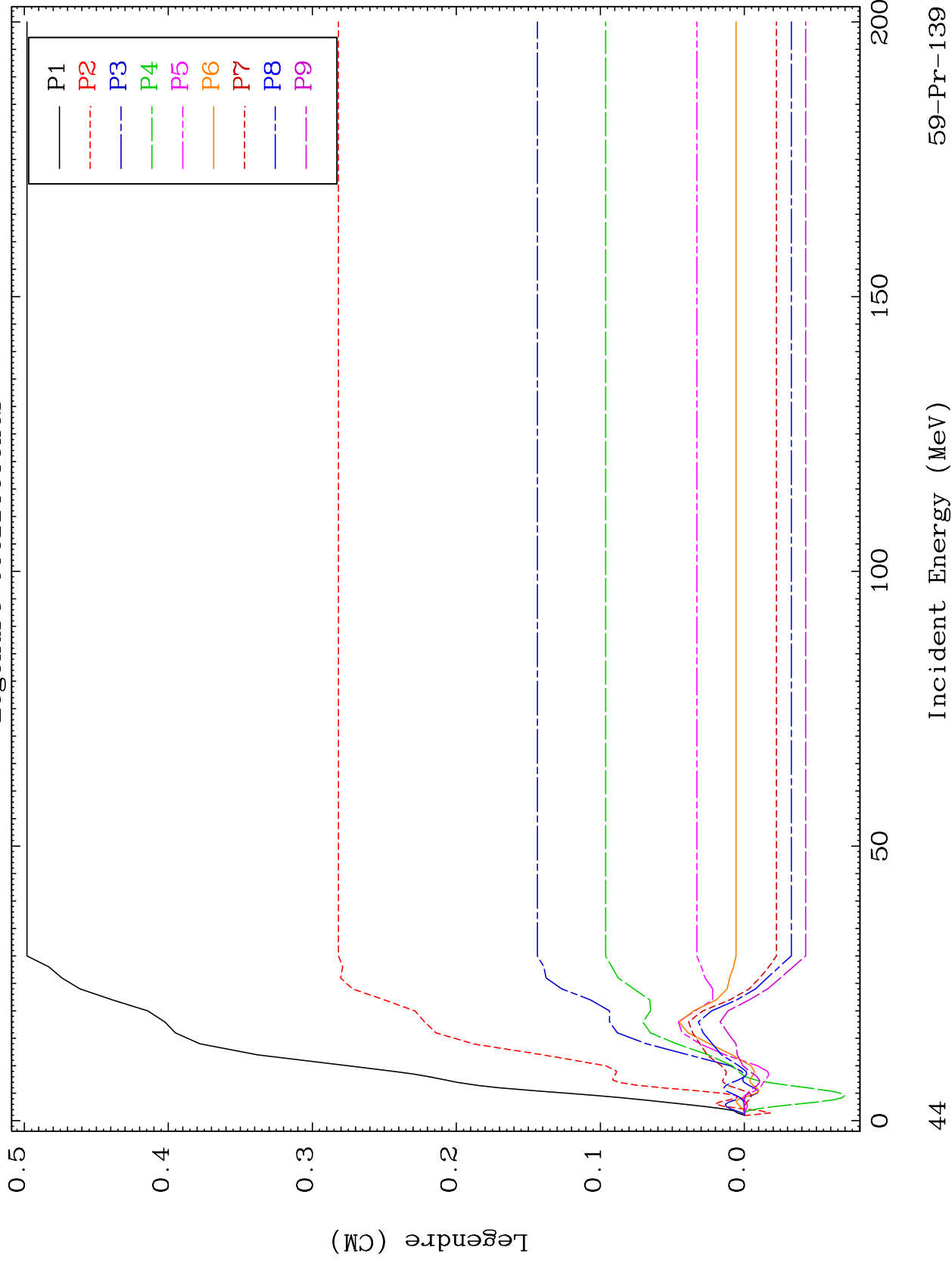
59-Pr-139



MAT 5919

MT= 57 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

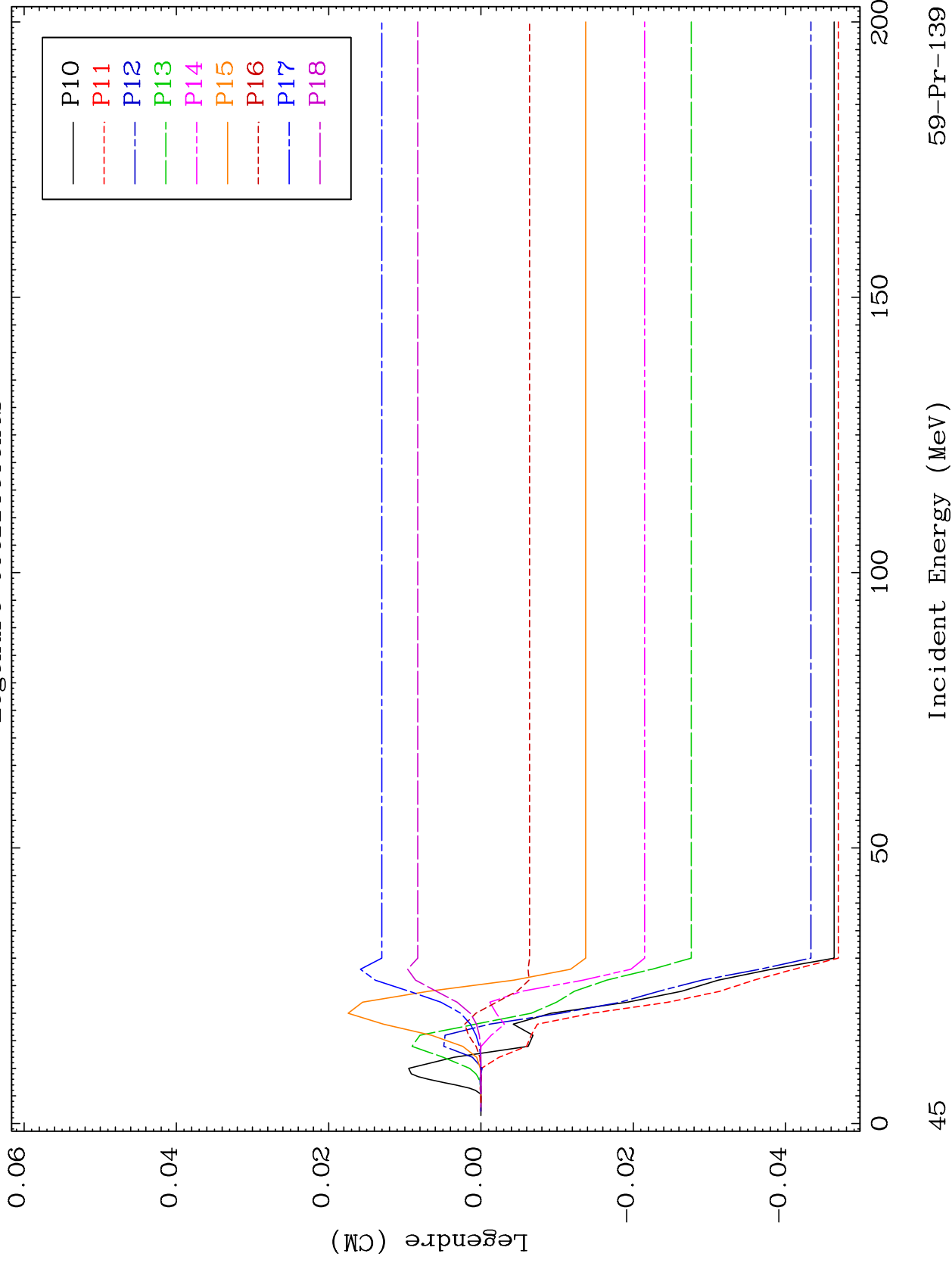
Incident Energy (MeV)

44

MAT 5919

MT= 57 (n,n') Level
Legendre Coefficients

59-Pr-139

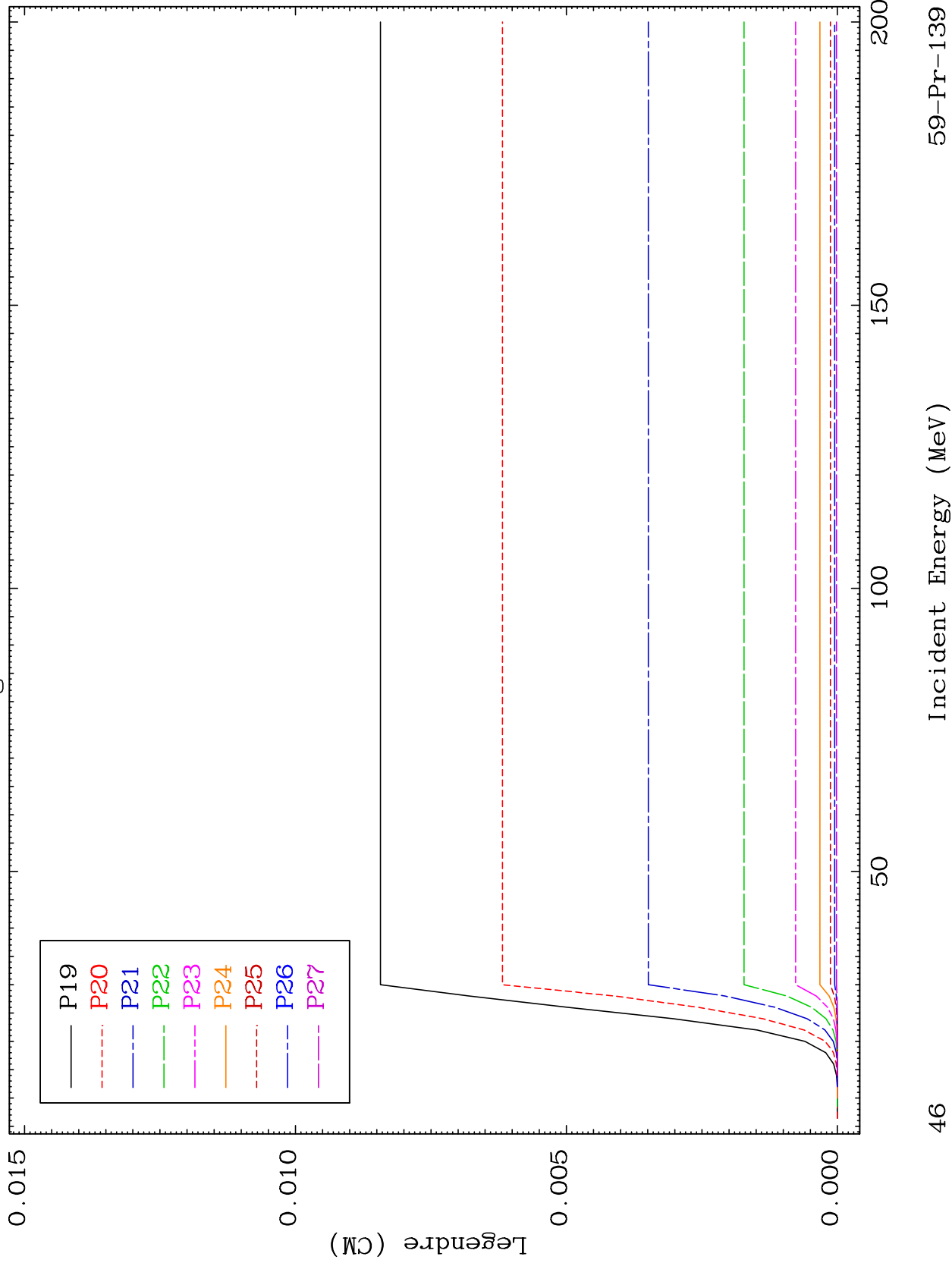


59-Pr-139

MAT 5919

MT= 57 (n,n') Level
Legendre Coefficients

59-Pr-139



46

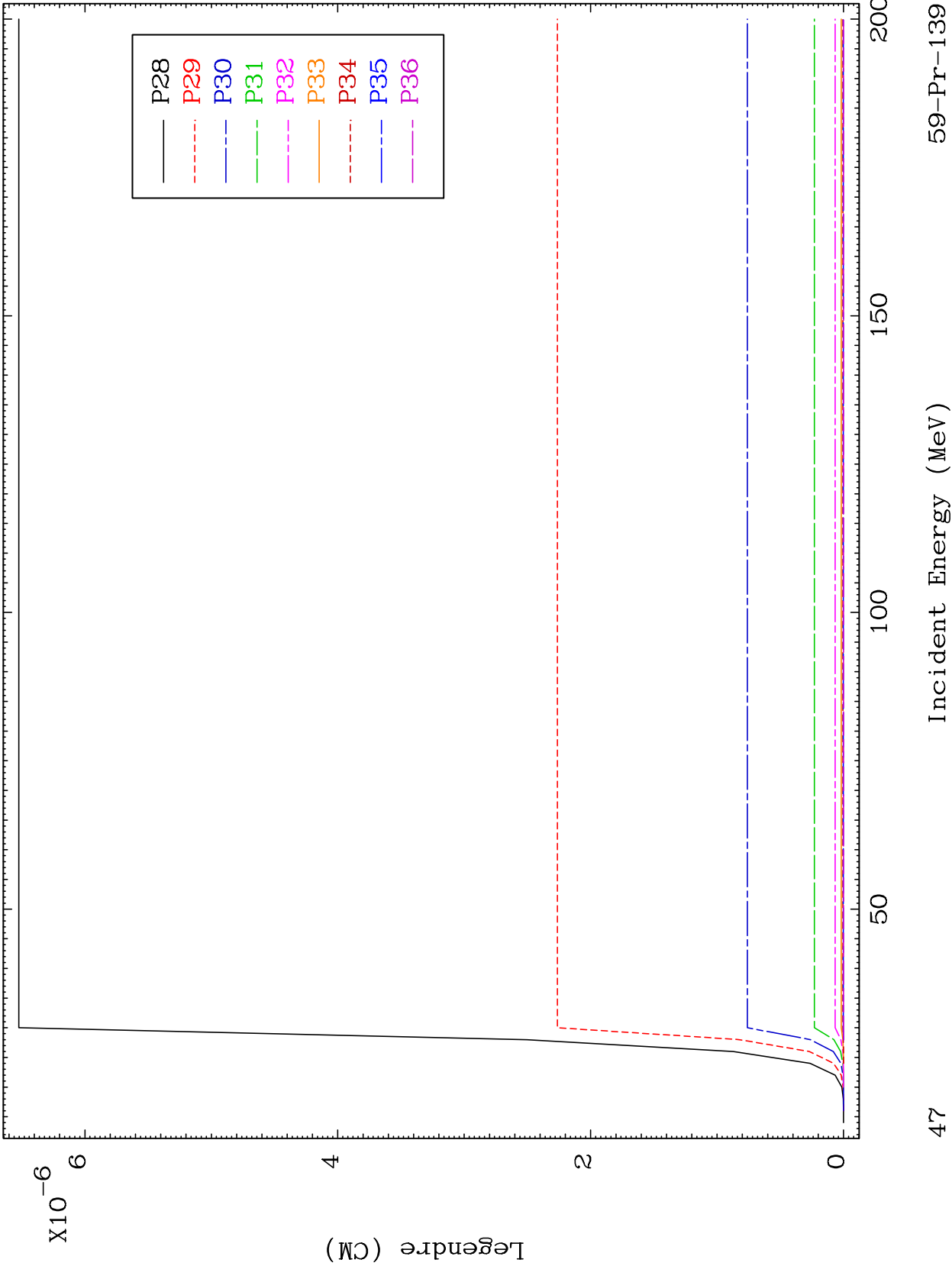
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 57 (n,n') Level
Legendre Coefficients

59-Pr-139



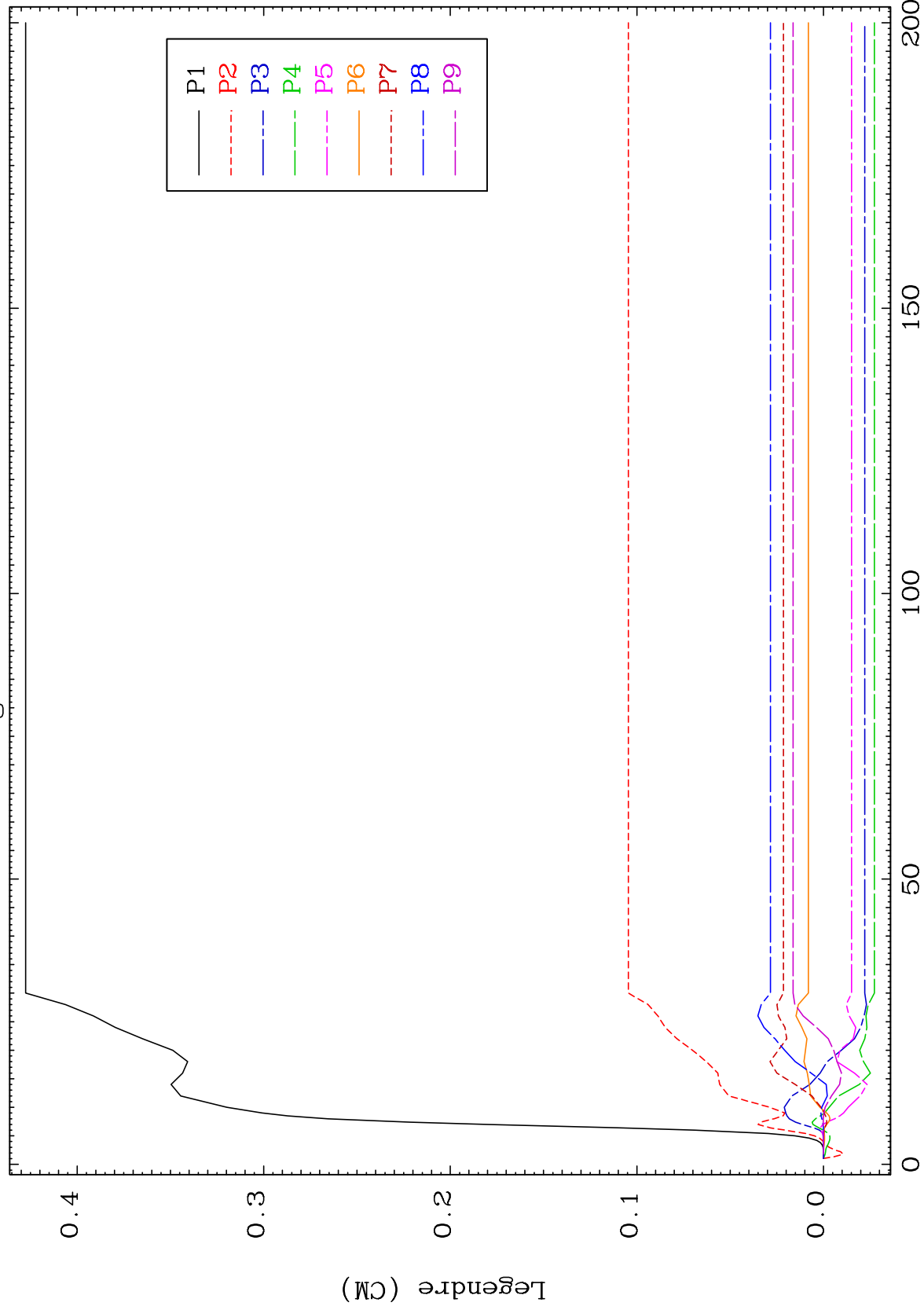
47

59-Pr-139

MAT 5919

MT= 58 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

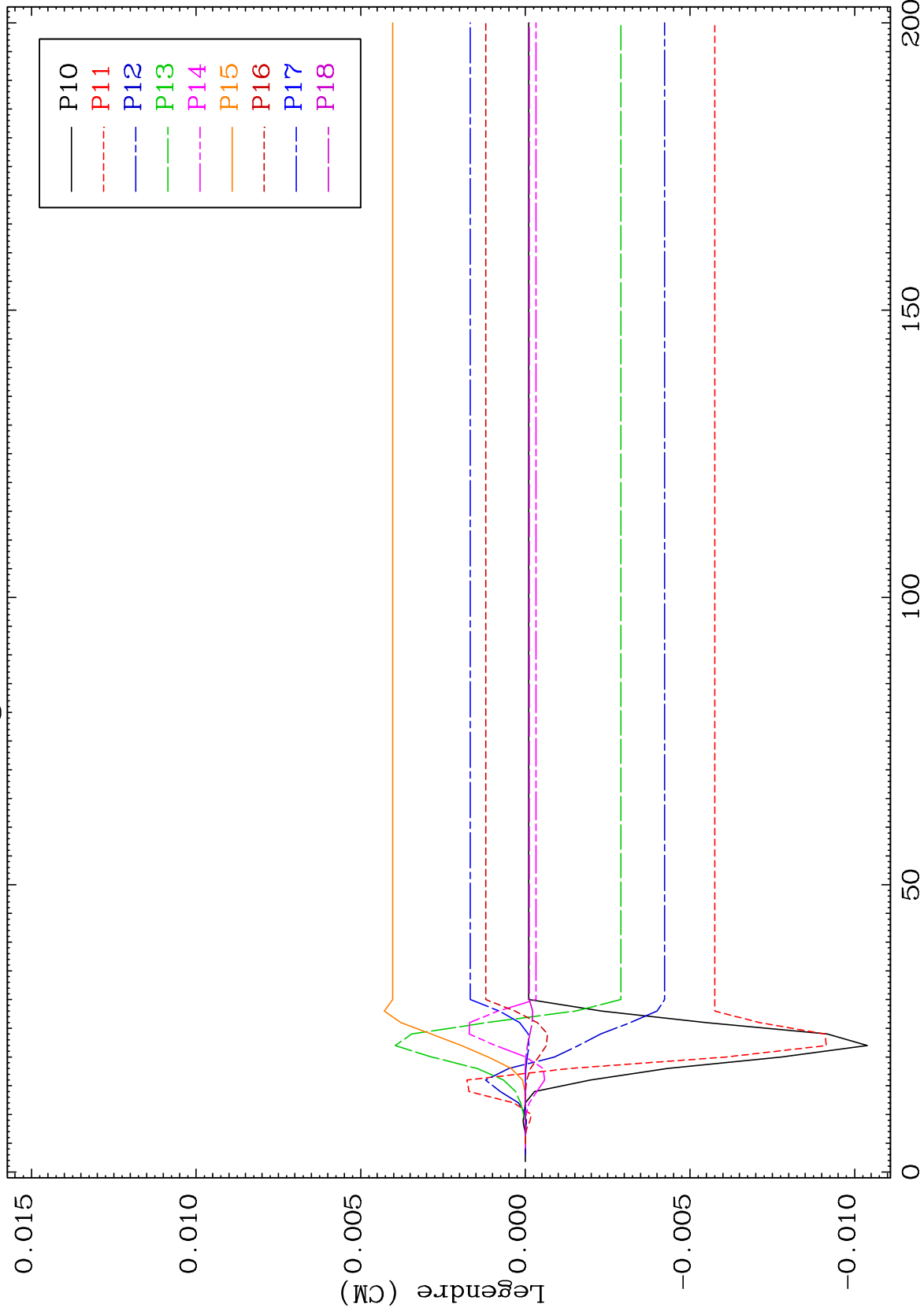
Incident Energy (MeV)

48

MAT 5919

MT= 58 (n,n') Level
Legendre Coefficients

59-Pr-139



49

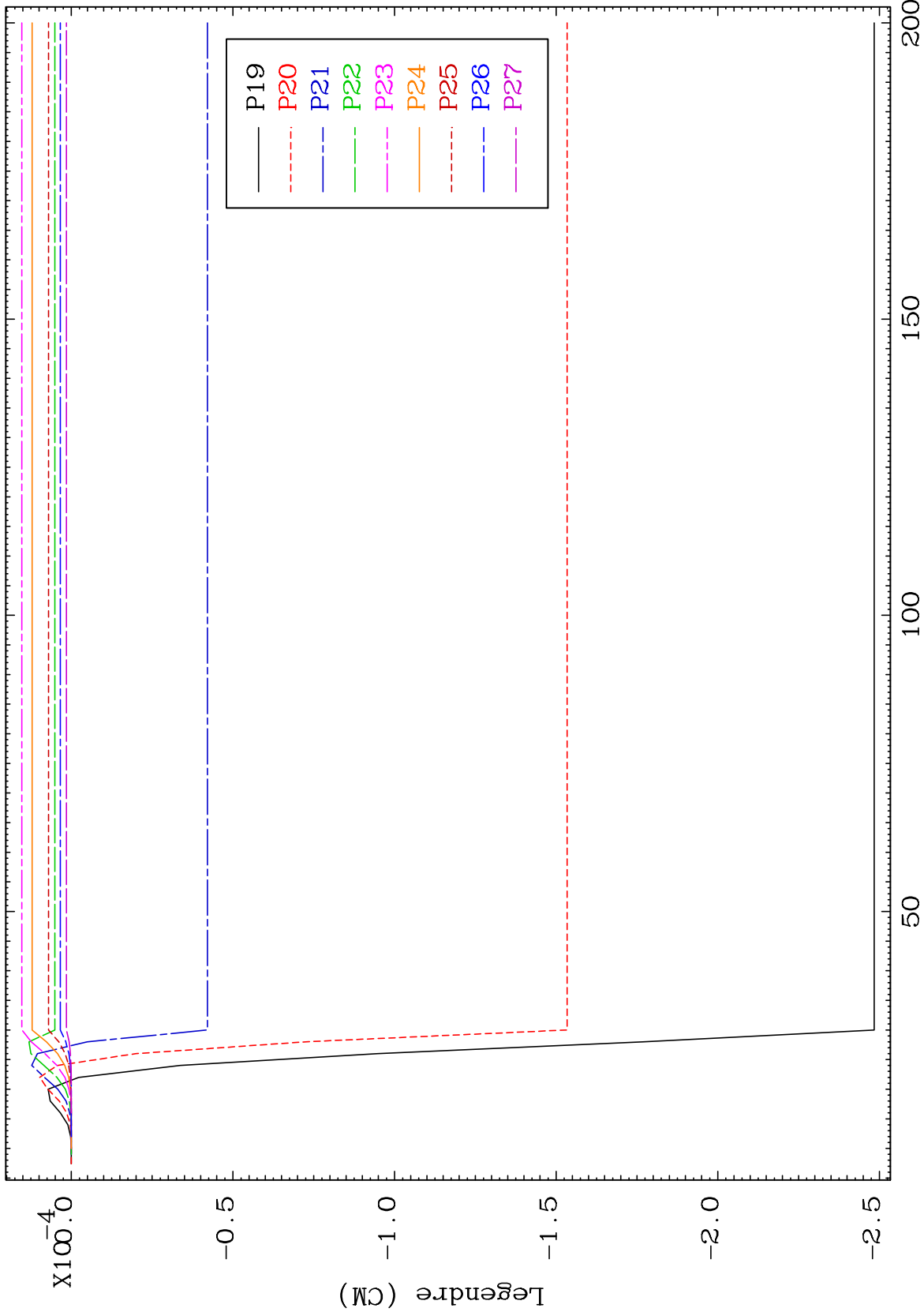
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 58 (n,n') Level
Legendre Coefficients

59-Pr-139



50

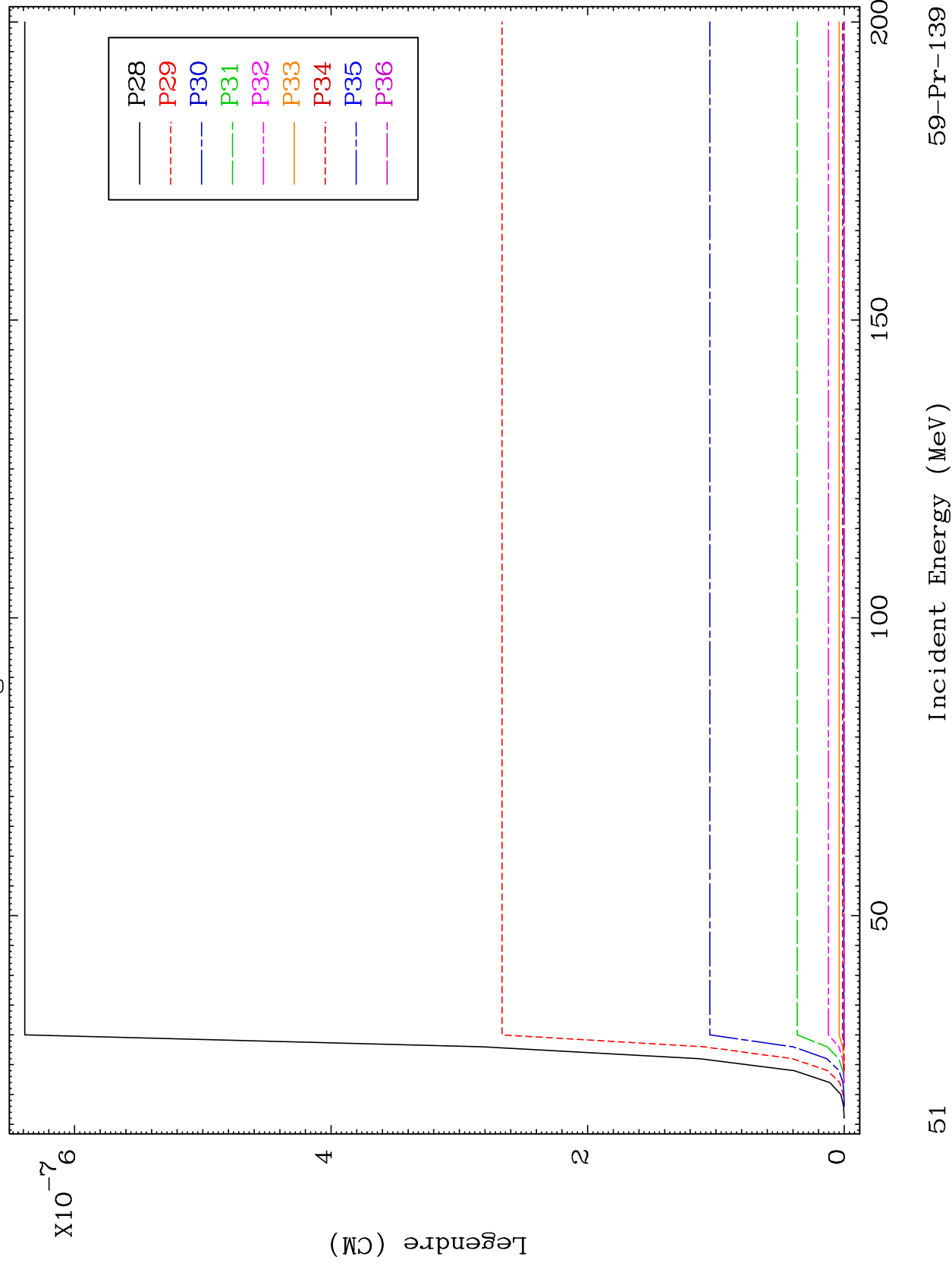
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 58 (n,n') Level
Legendre Coefficients

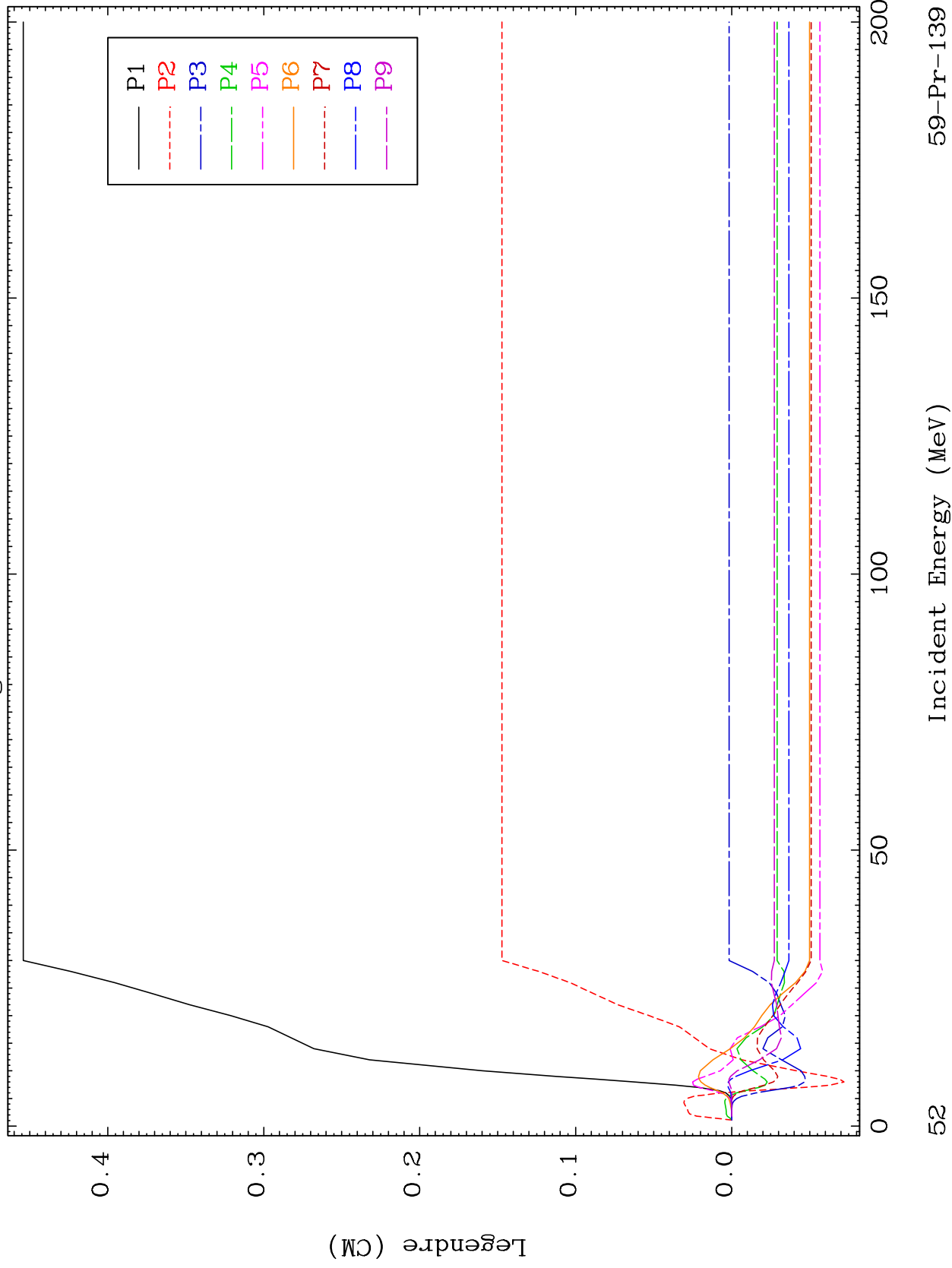
59-Pr-139



MAT 5919

MT= 59 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

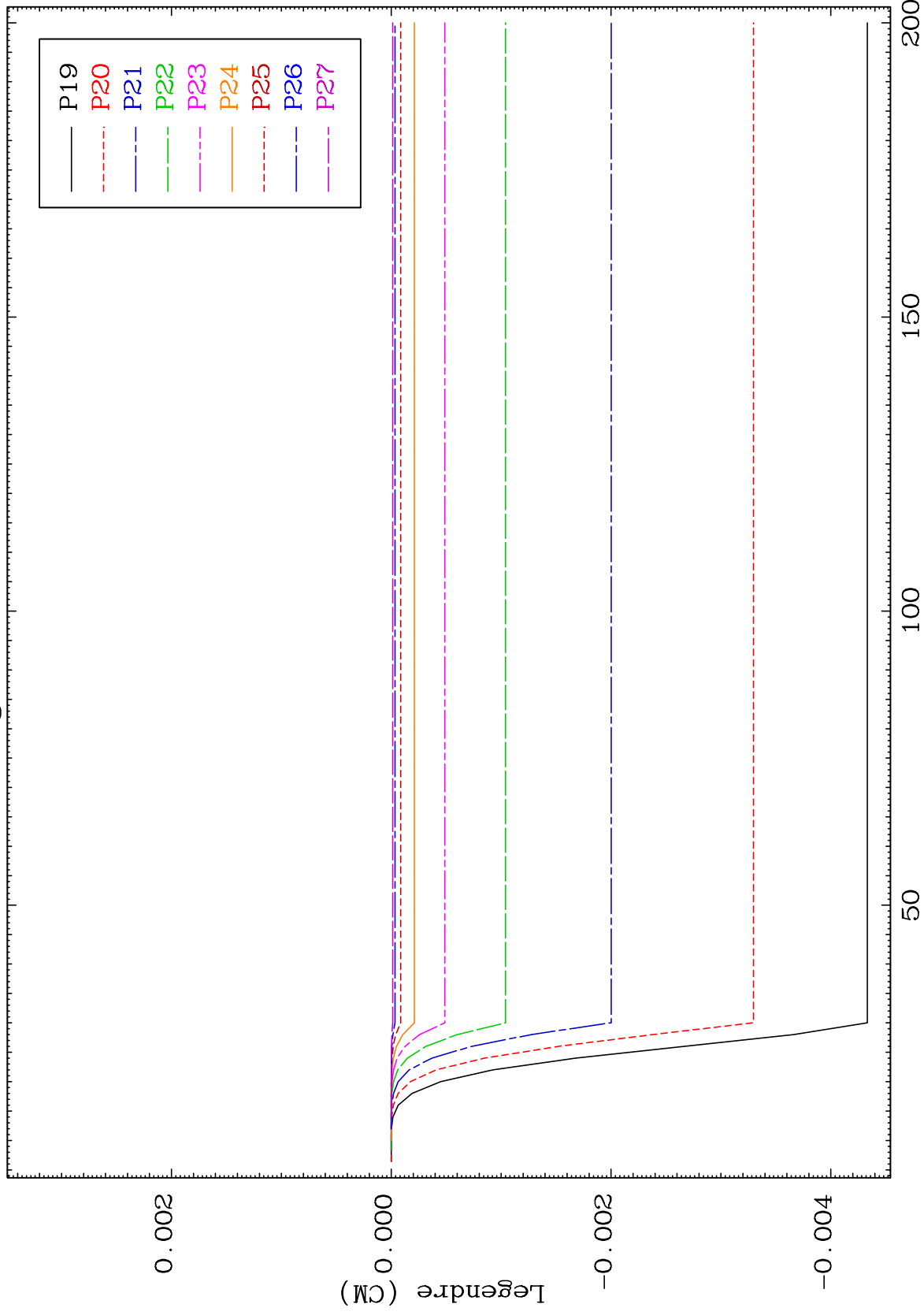
Incident Energy (MeV)

52

MAT 5919

MT= 59 (n,n') Level
Legendre Coefficients

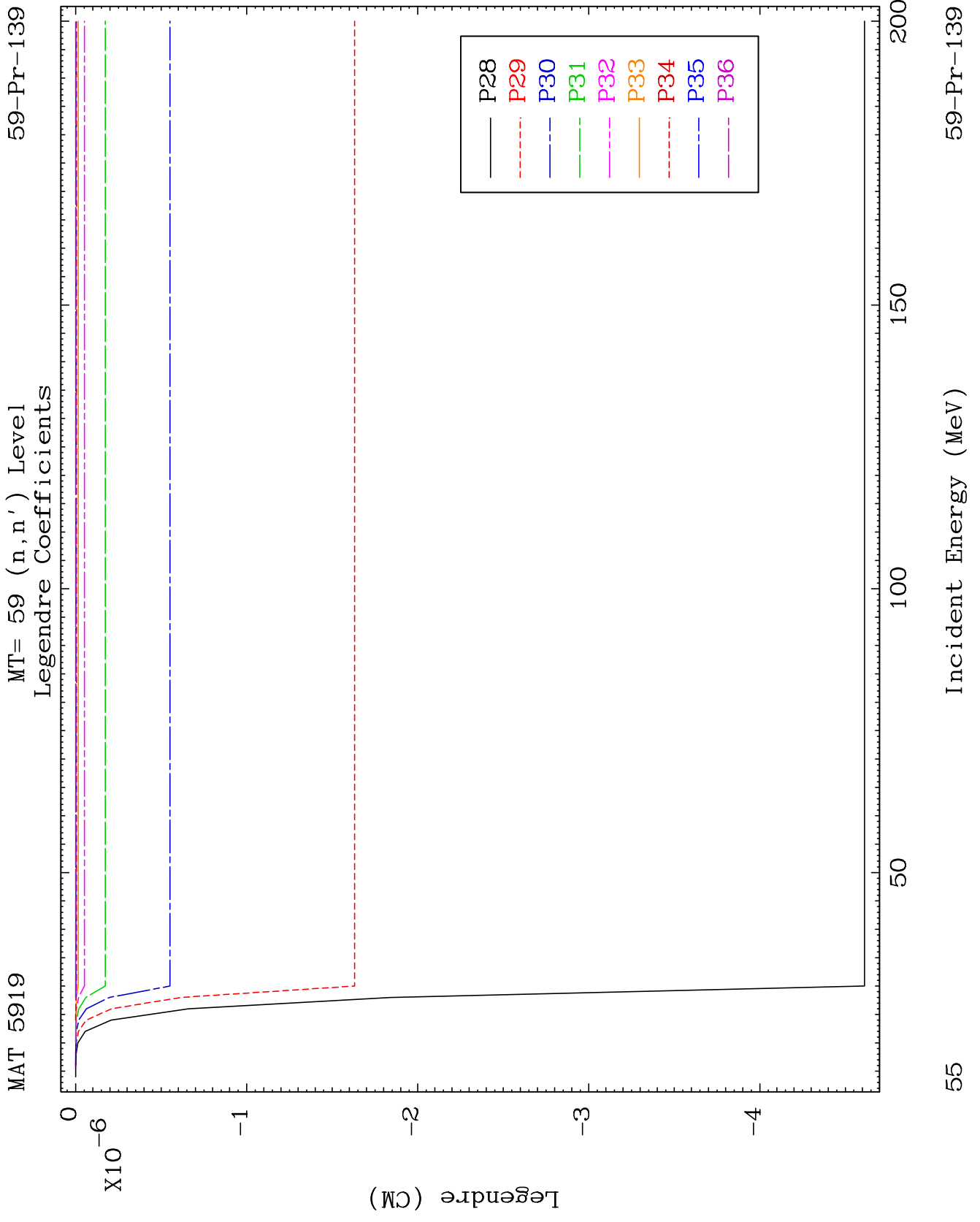
59-Pr-139



54

Incident Energy (MeV)

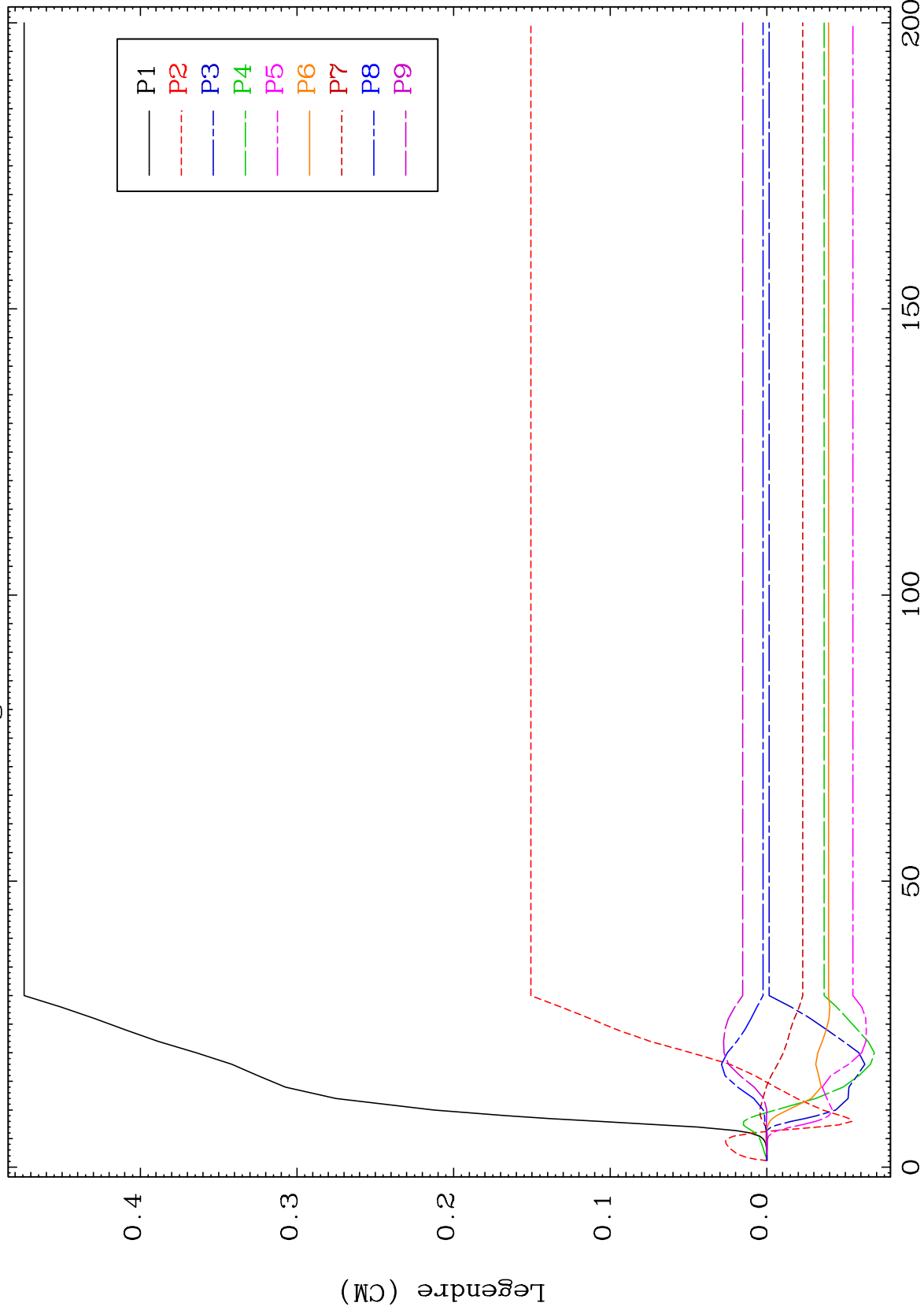
59-Pr-139



MAT 5919

MT= 60 (n,n') Level
Legendre Coefficients

59-Pr-139



56

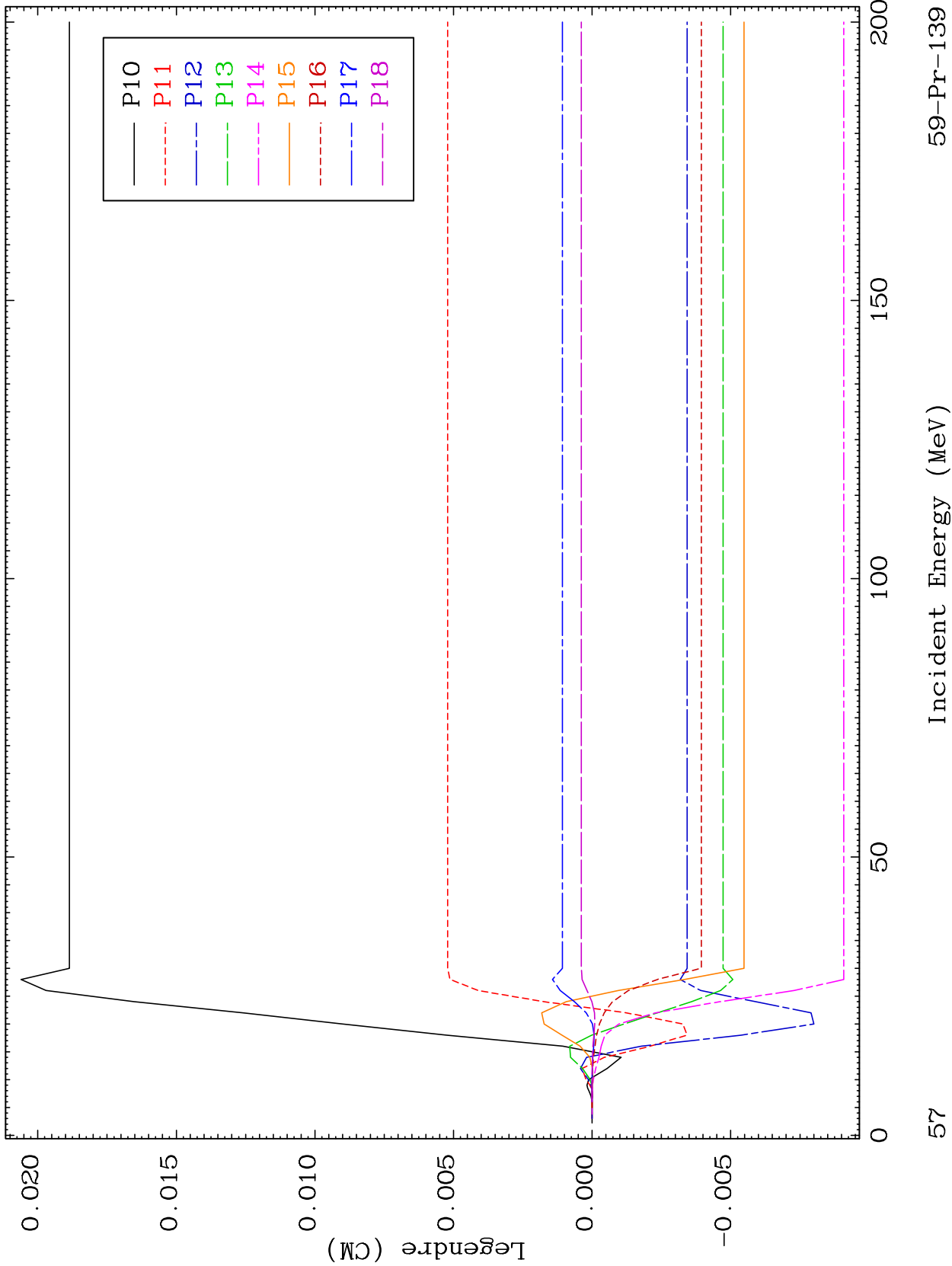
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 60 (n,n') Level
Legendre Coefficients

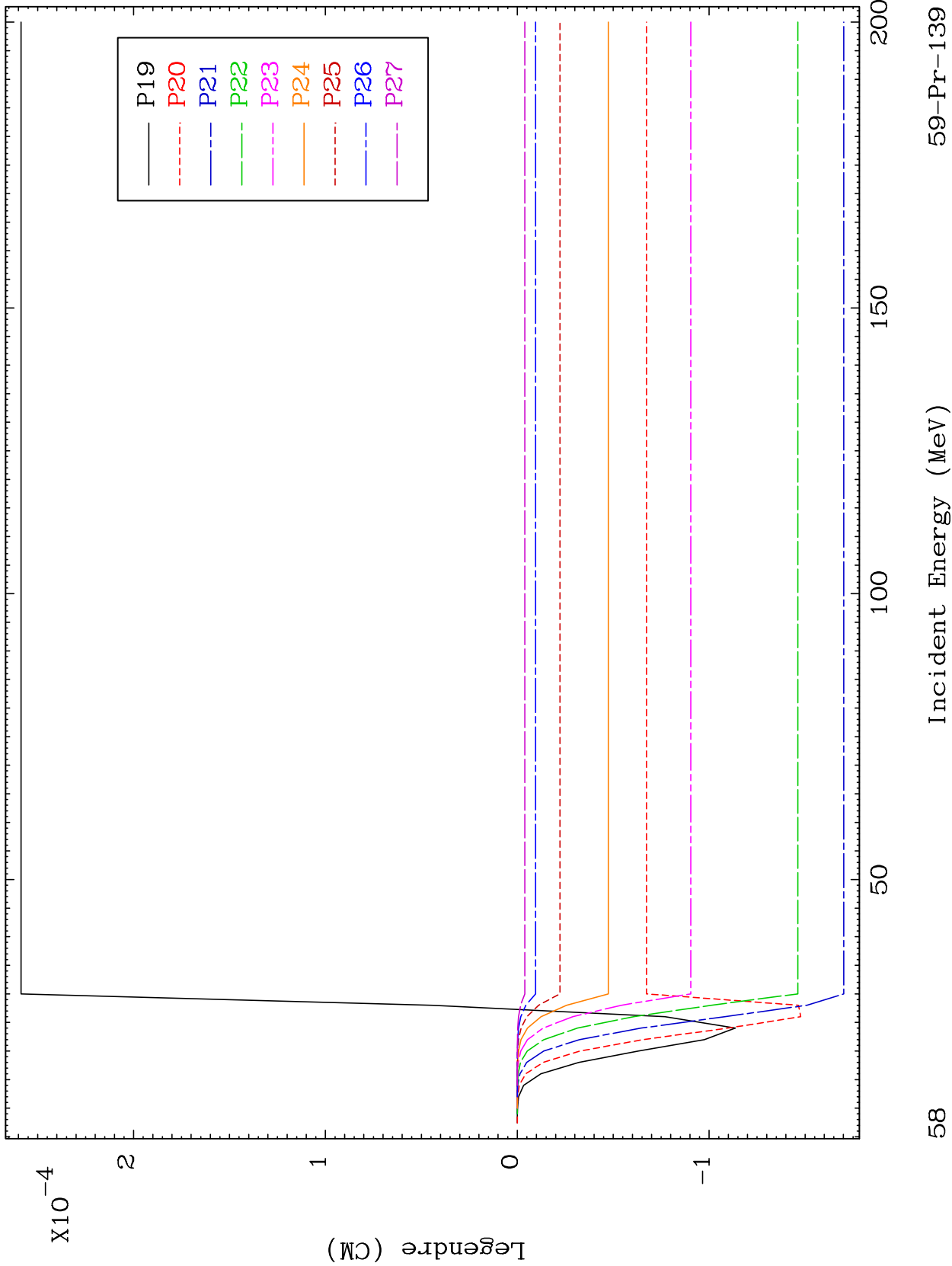
59-Pr-139

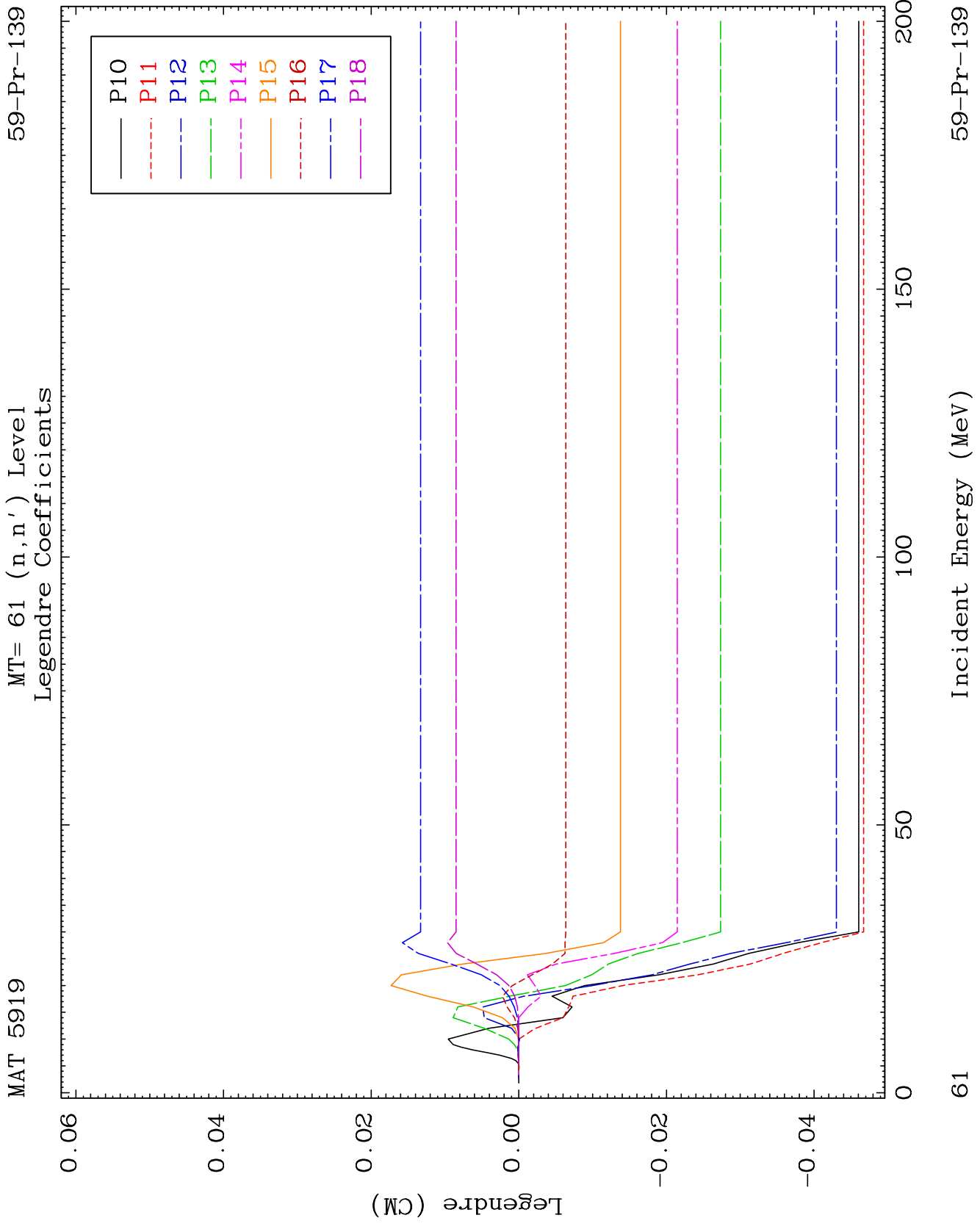


57

Incident Energy (MeV)

59-Pr-139

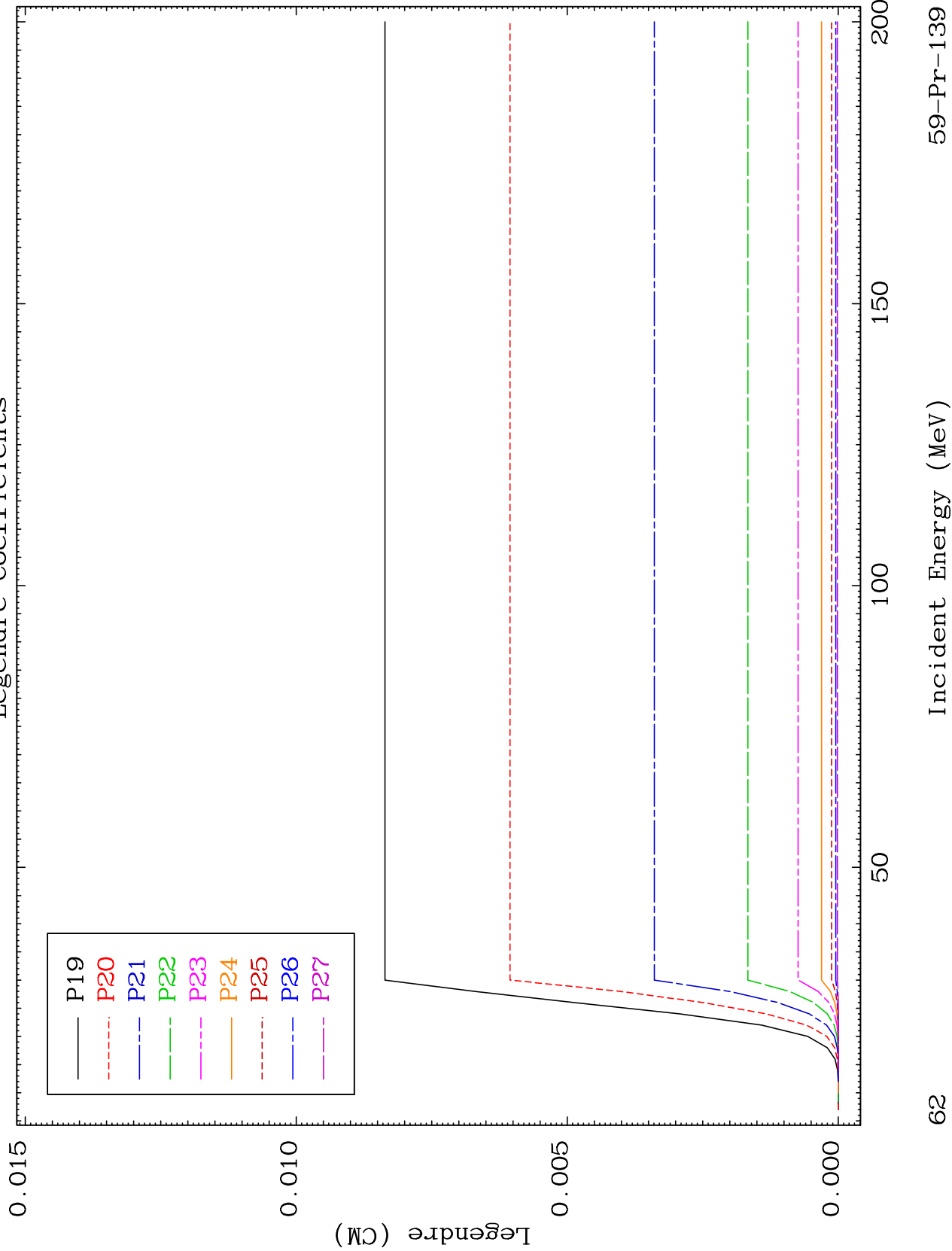




MAT 5919

MT= 61 (n,n') Level
Legendre Coefficients

59-Pr-139



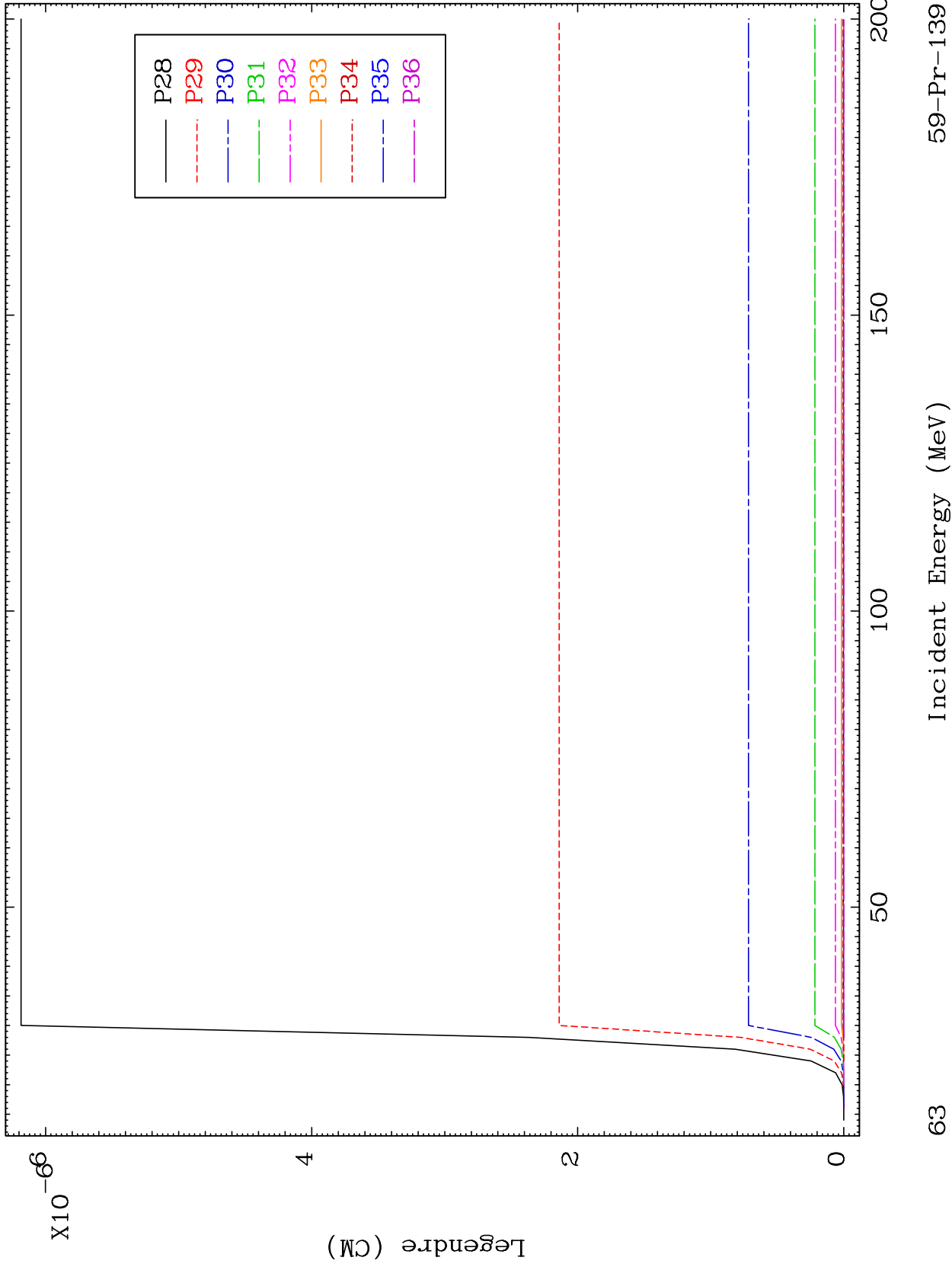
62

59-Pr-139

MAT 5919

MT= 61 (n,n') Level
Legendre Coefficients

59-Pr-139



63

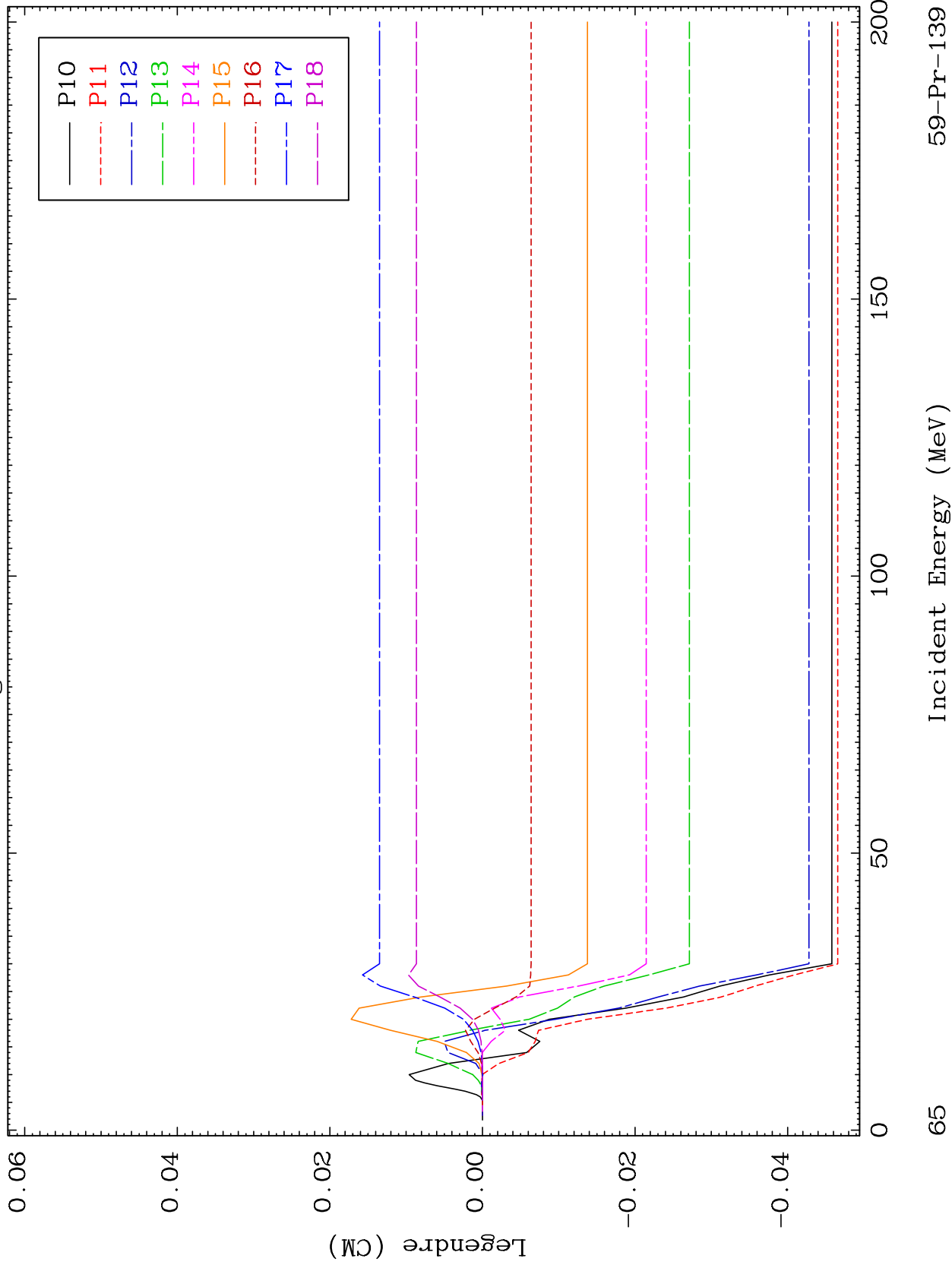
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 62 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

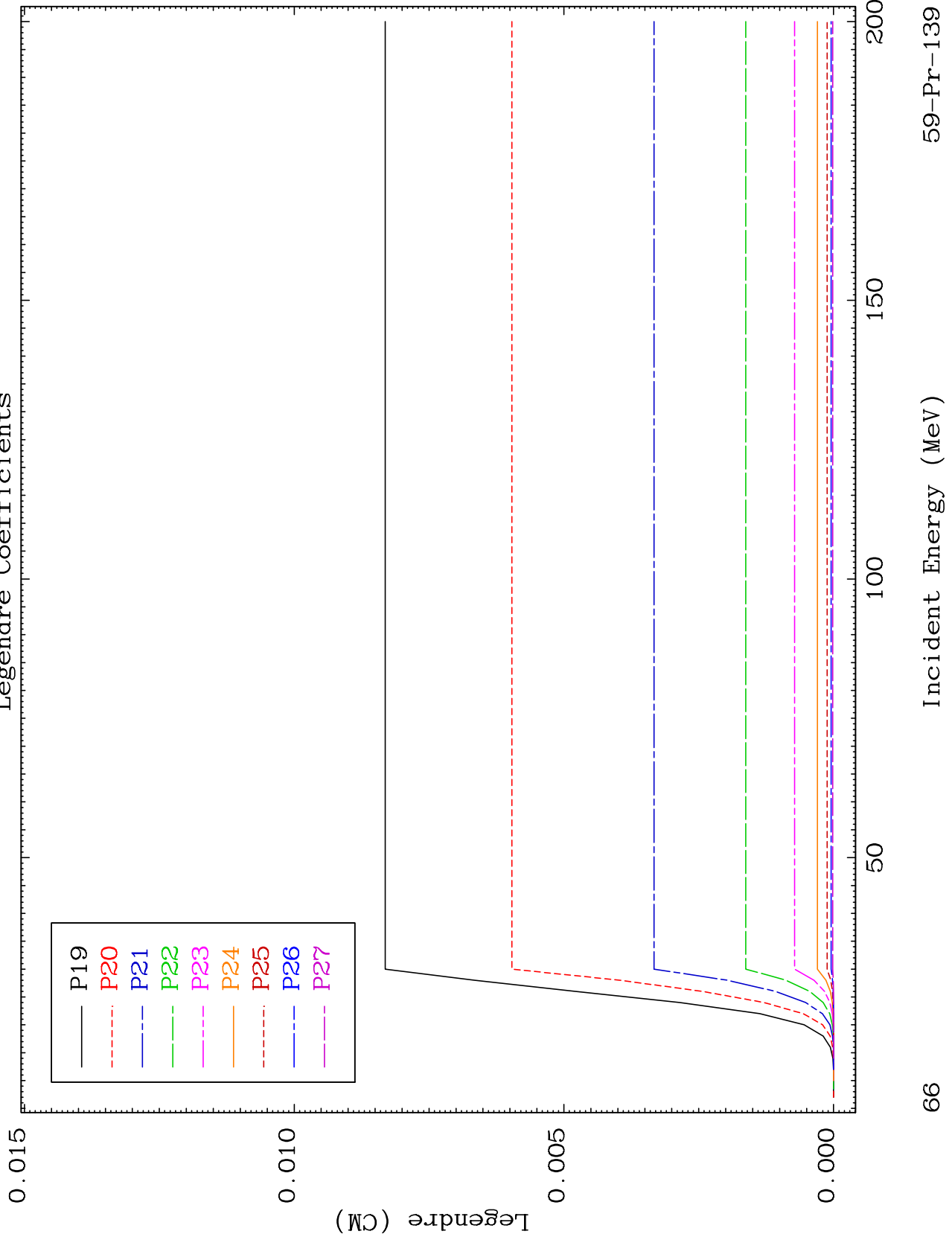
Incident Energy (MeV)

65

MAT 5919

MT= 62 (n,n') Level
Legendre Coefficients

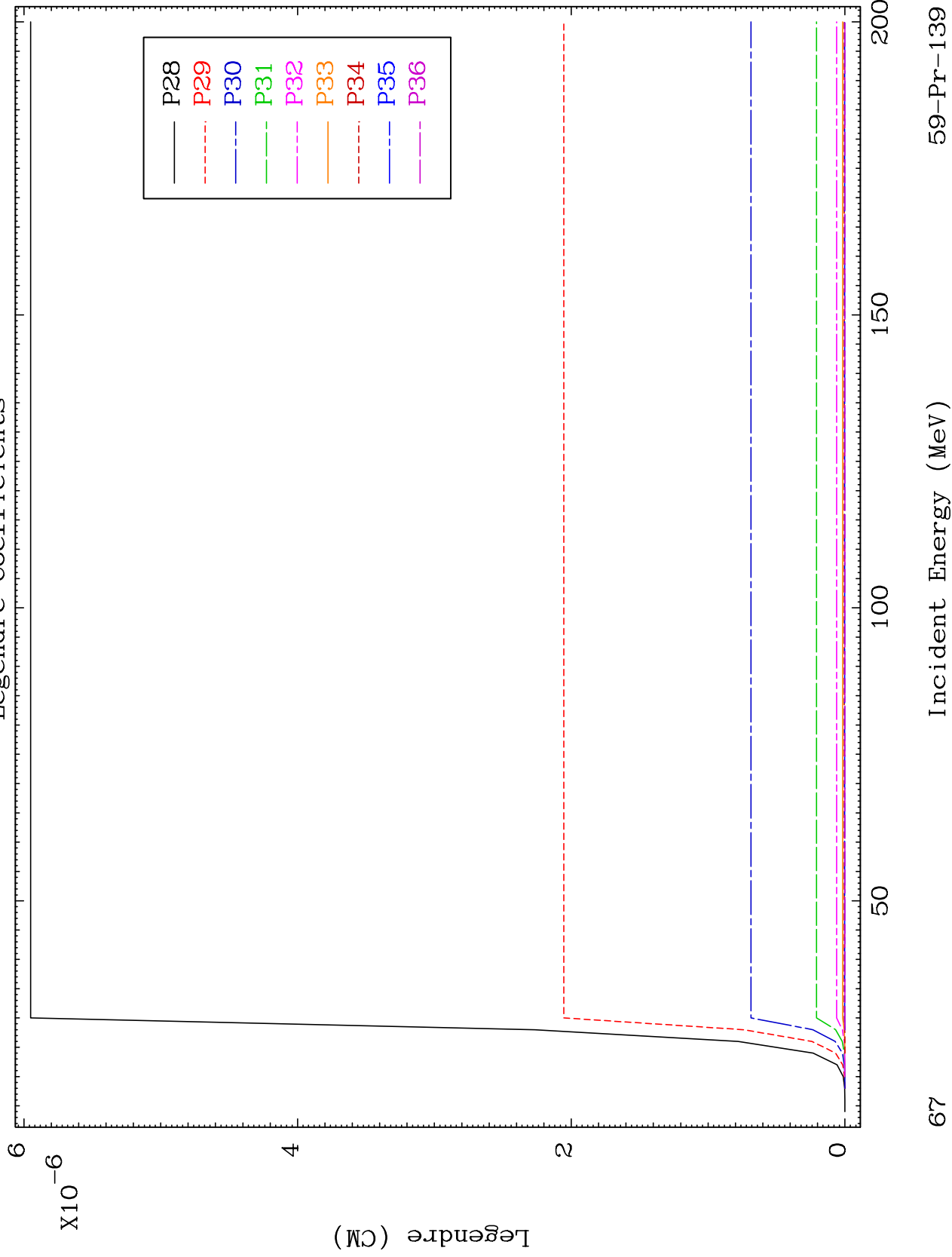
59-Pr-139



MAT 5919

MT= 62 (n,n') Level
Legendre Coefficients

59-Pr-139



67

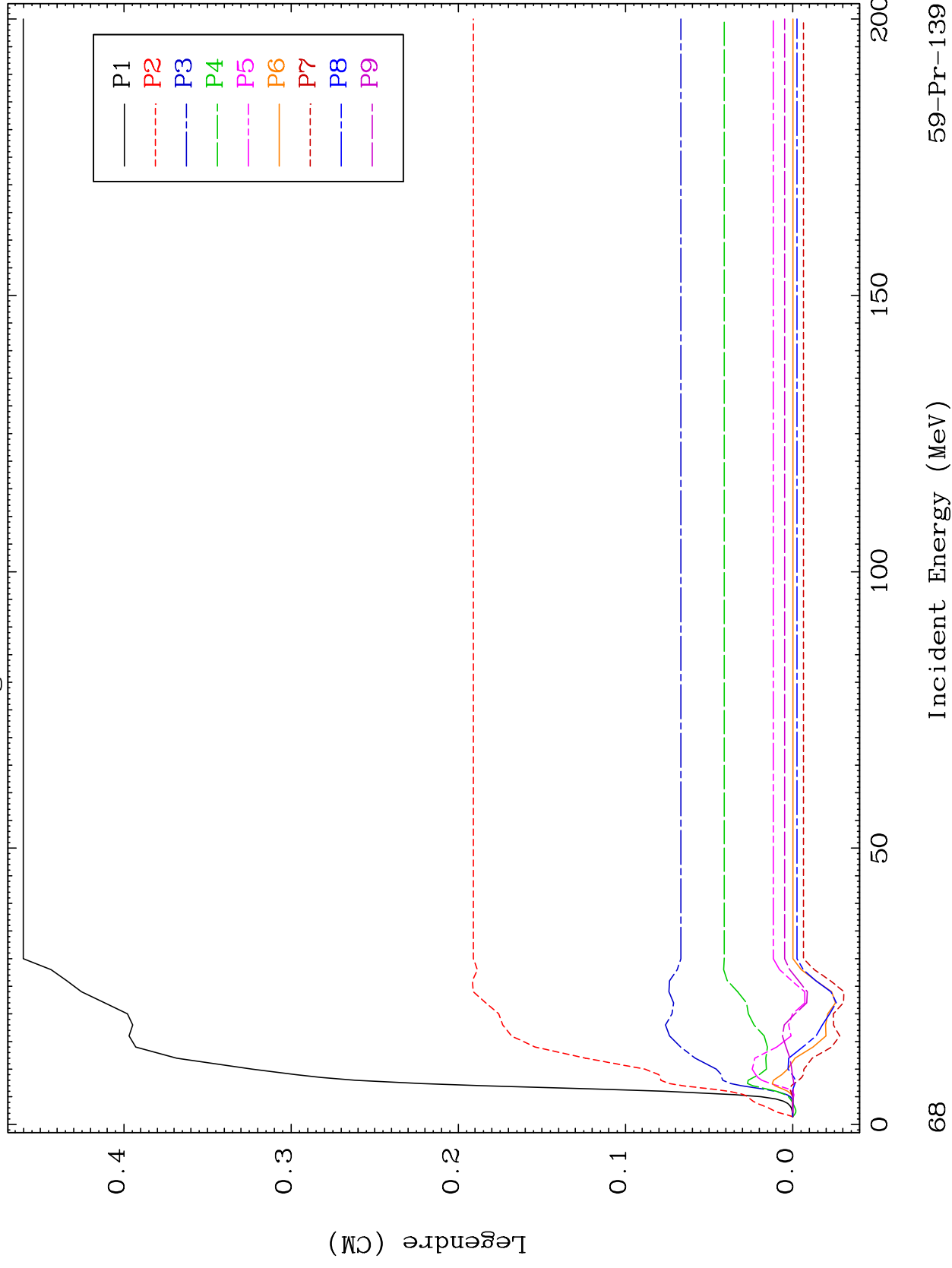
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 63 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

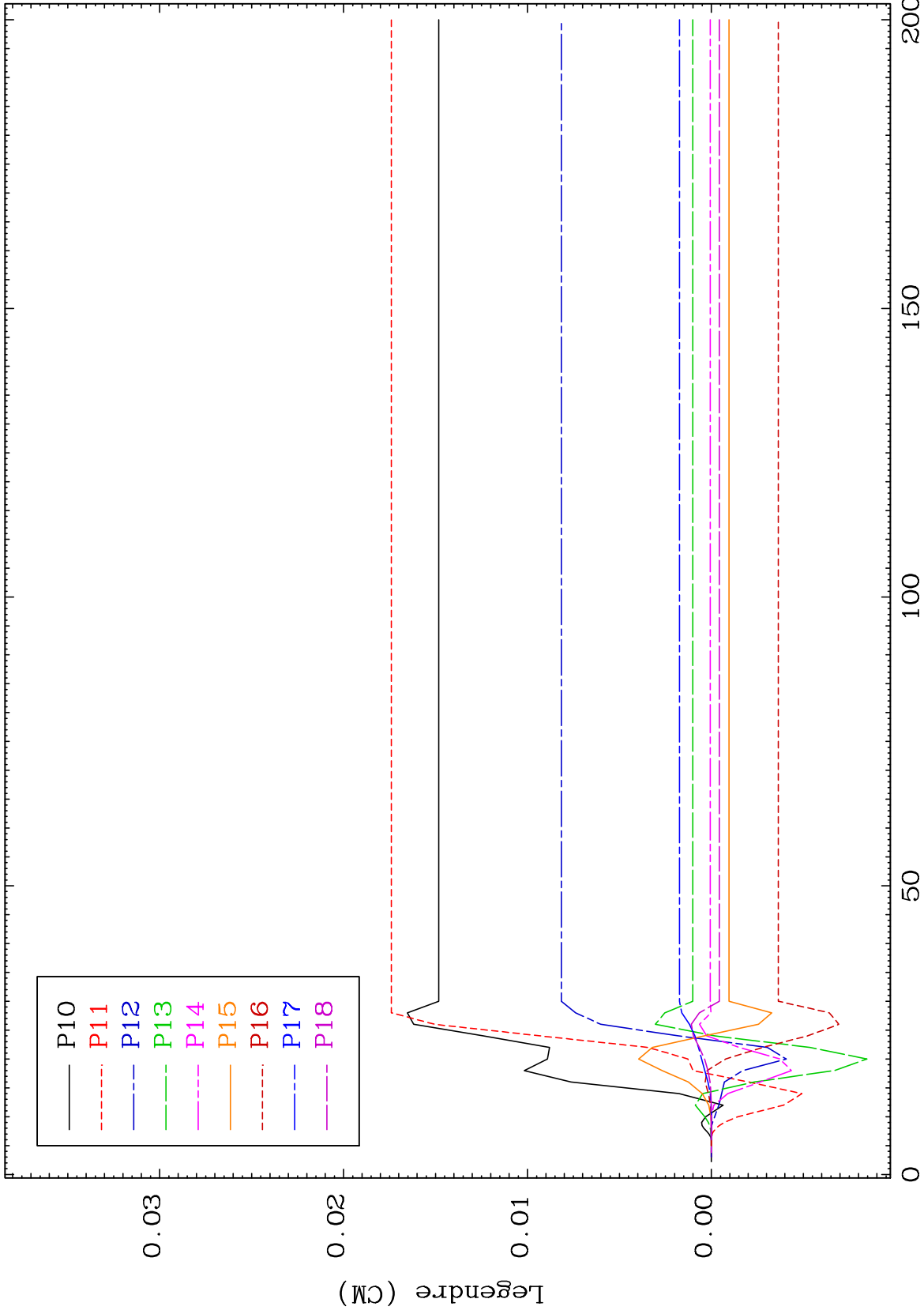
Incident Energy (MeV)

68

MAT 5919

MT= 63 (n,n') Level
Legendre Coefficients

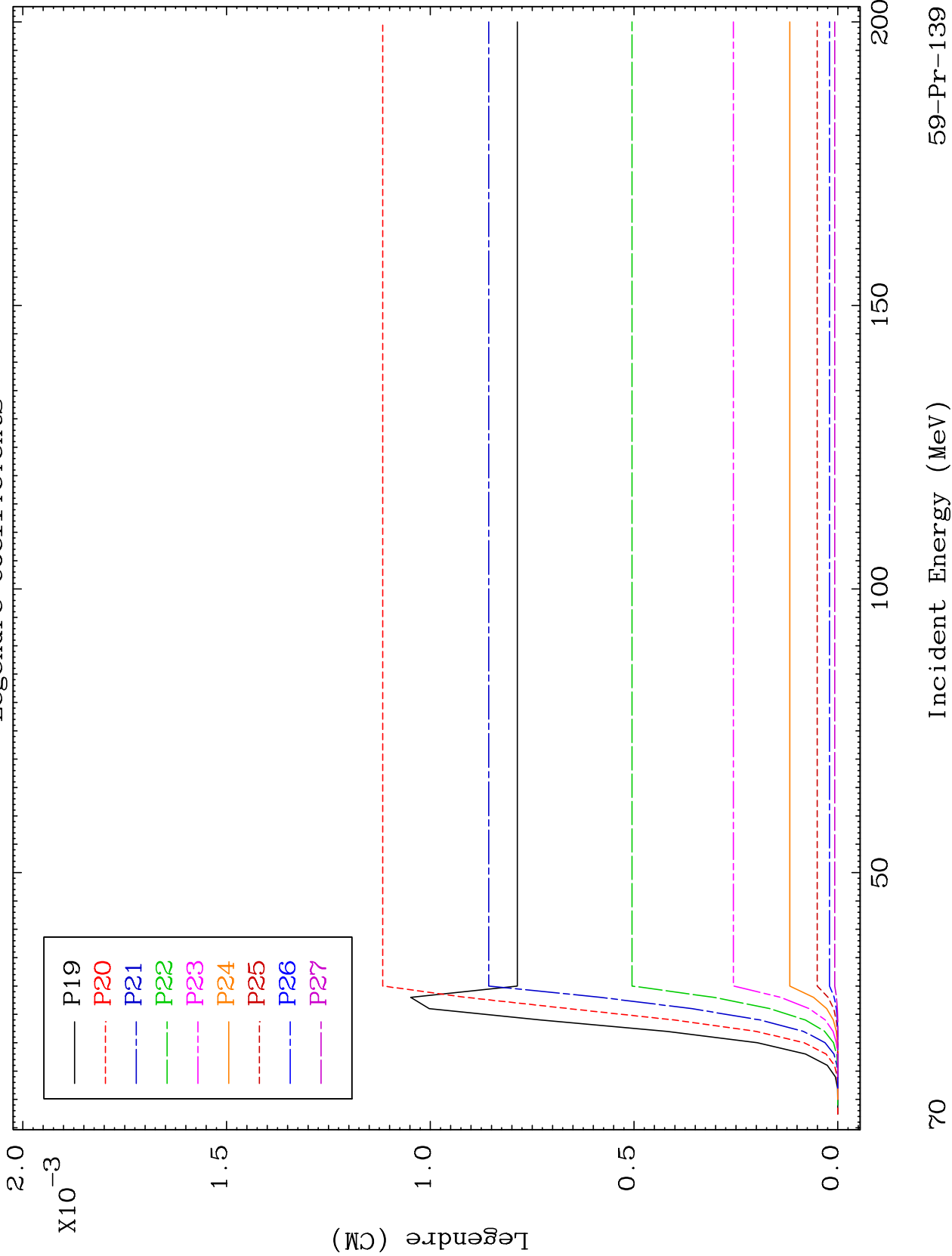
59-Pr-139



69

Incident Energy (MeV)

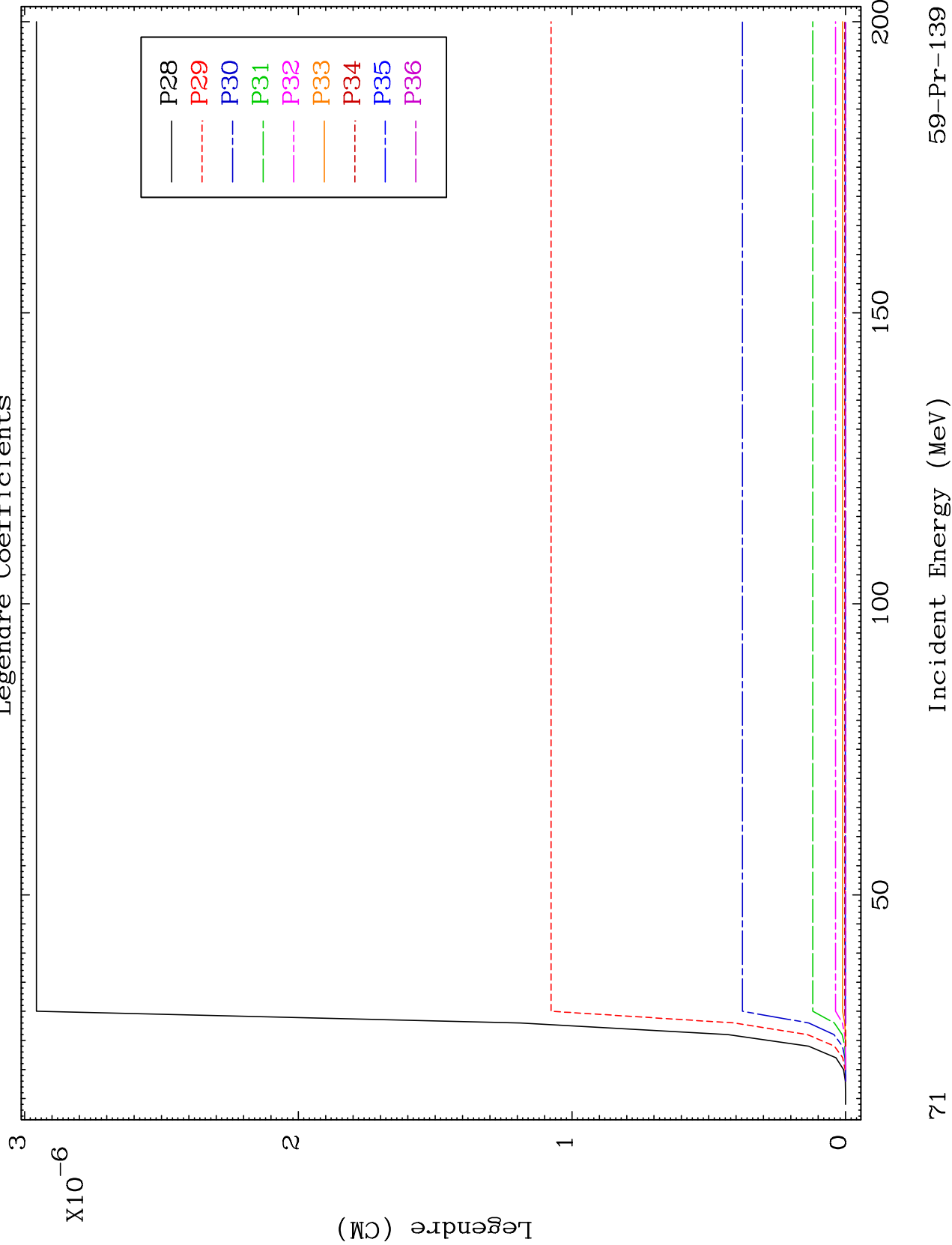
59-Pr-139



MAT 5919

MT= 63 (n,n') Level
Legendre Coefficients

59-Pr-139



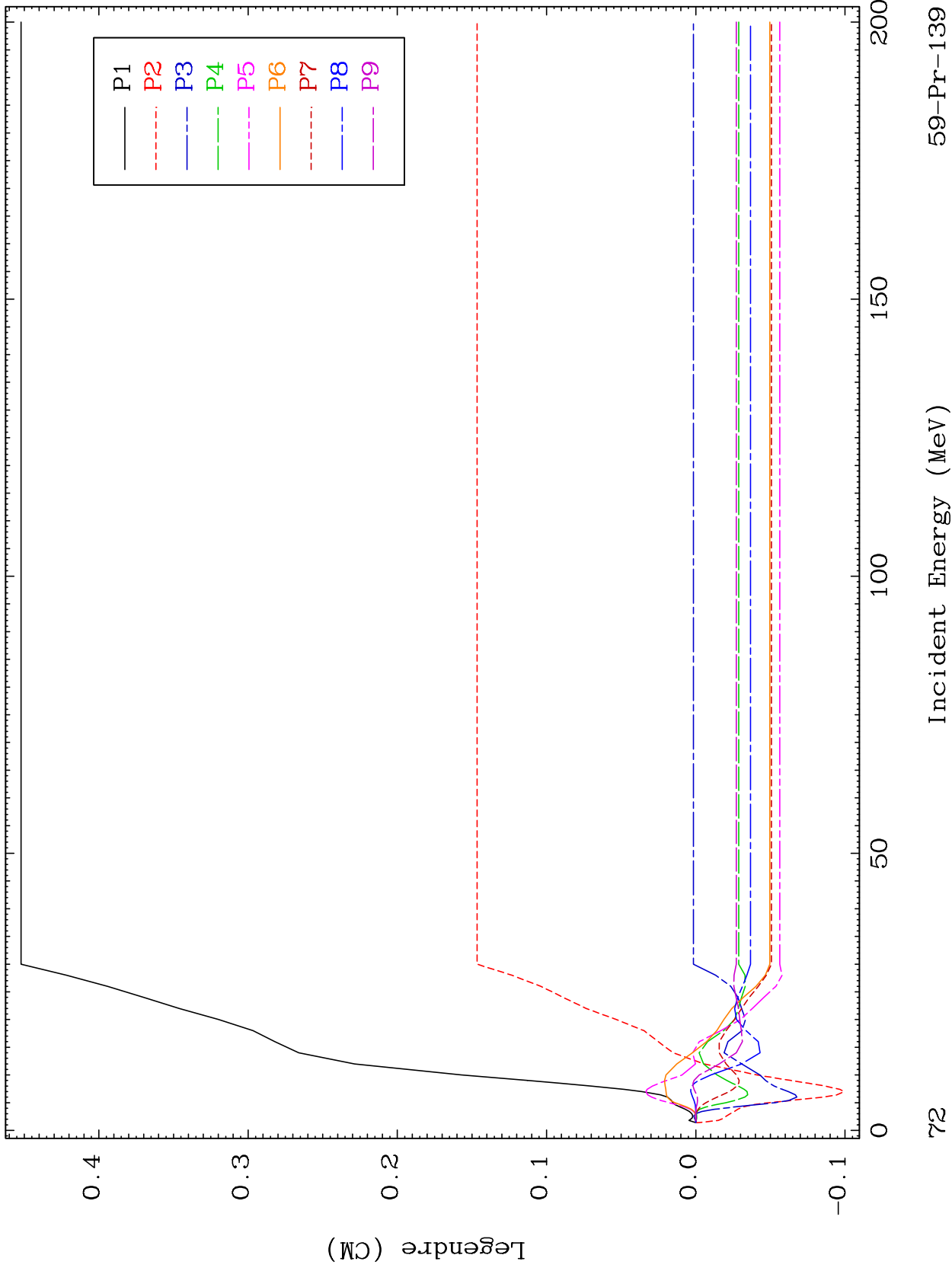
71

59-Pr-139

MAT 5919

MT= 64 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

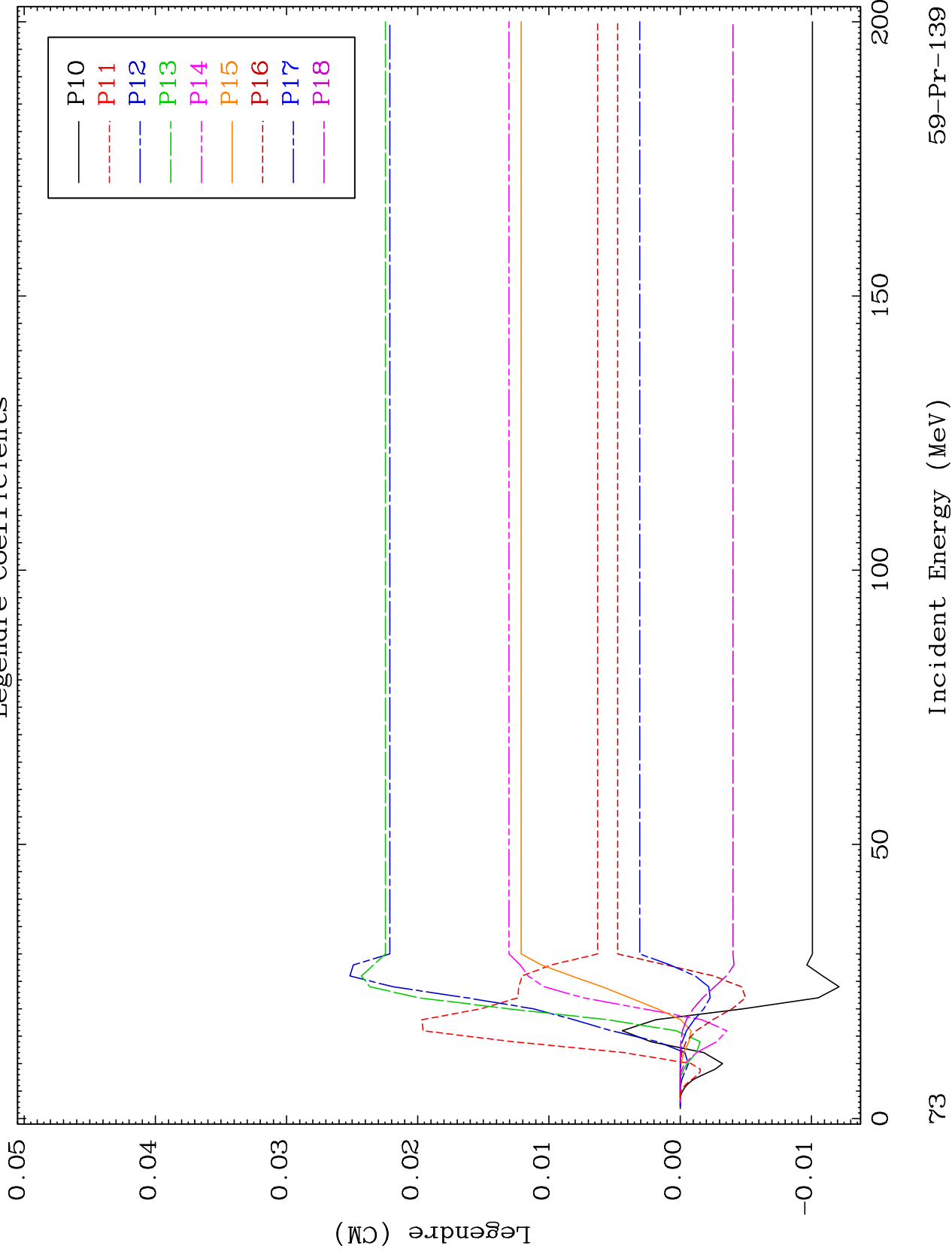
Incident Energy (MeV)

72

MAT 5919

MT= 64 (n,n') Level
Legendre Coefficients

59-Pr-139



73

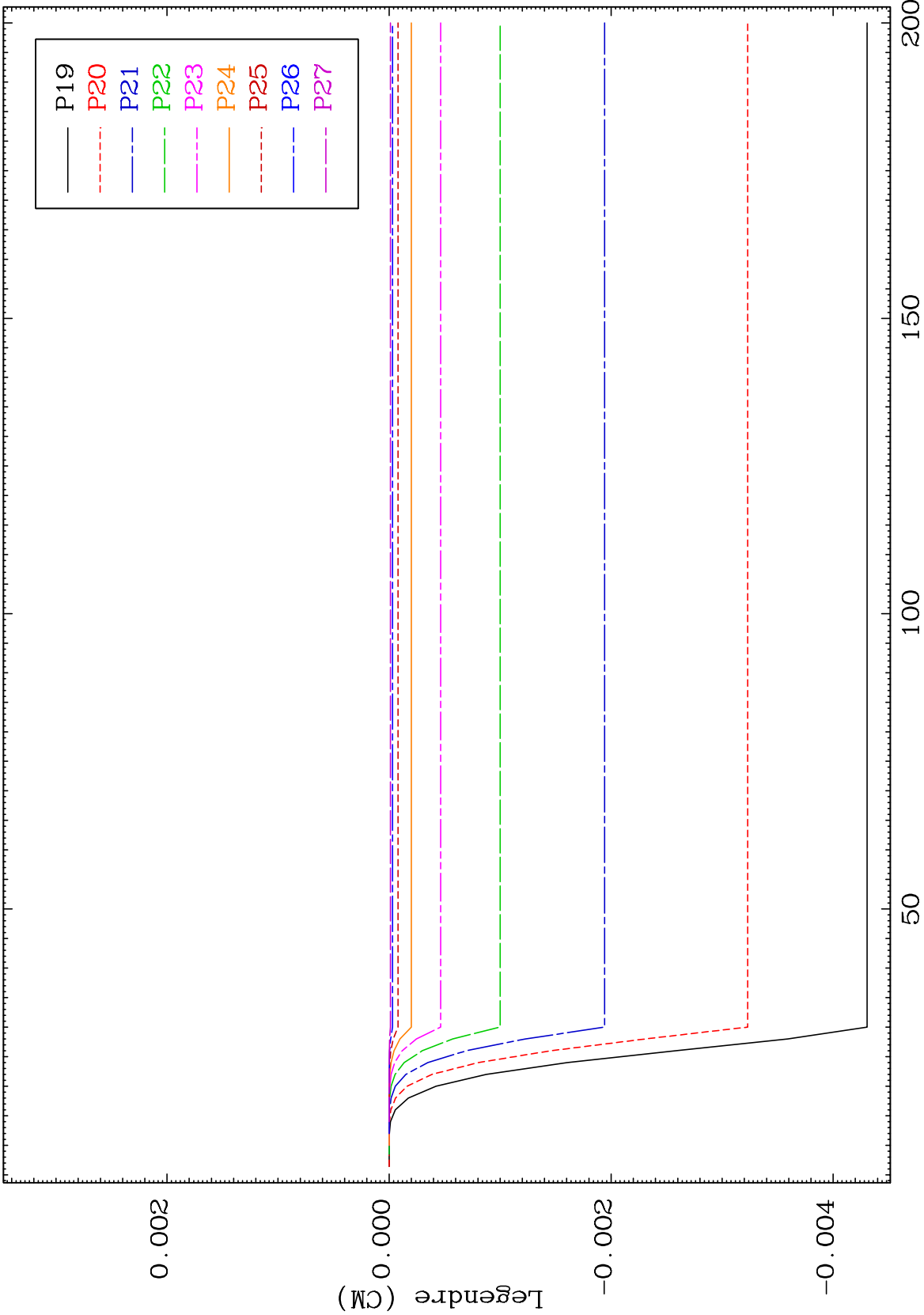
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 64 (n,n') Level
Legendre Coefficients

59-Pr-139



74

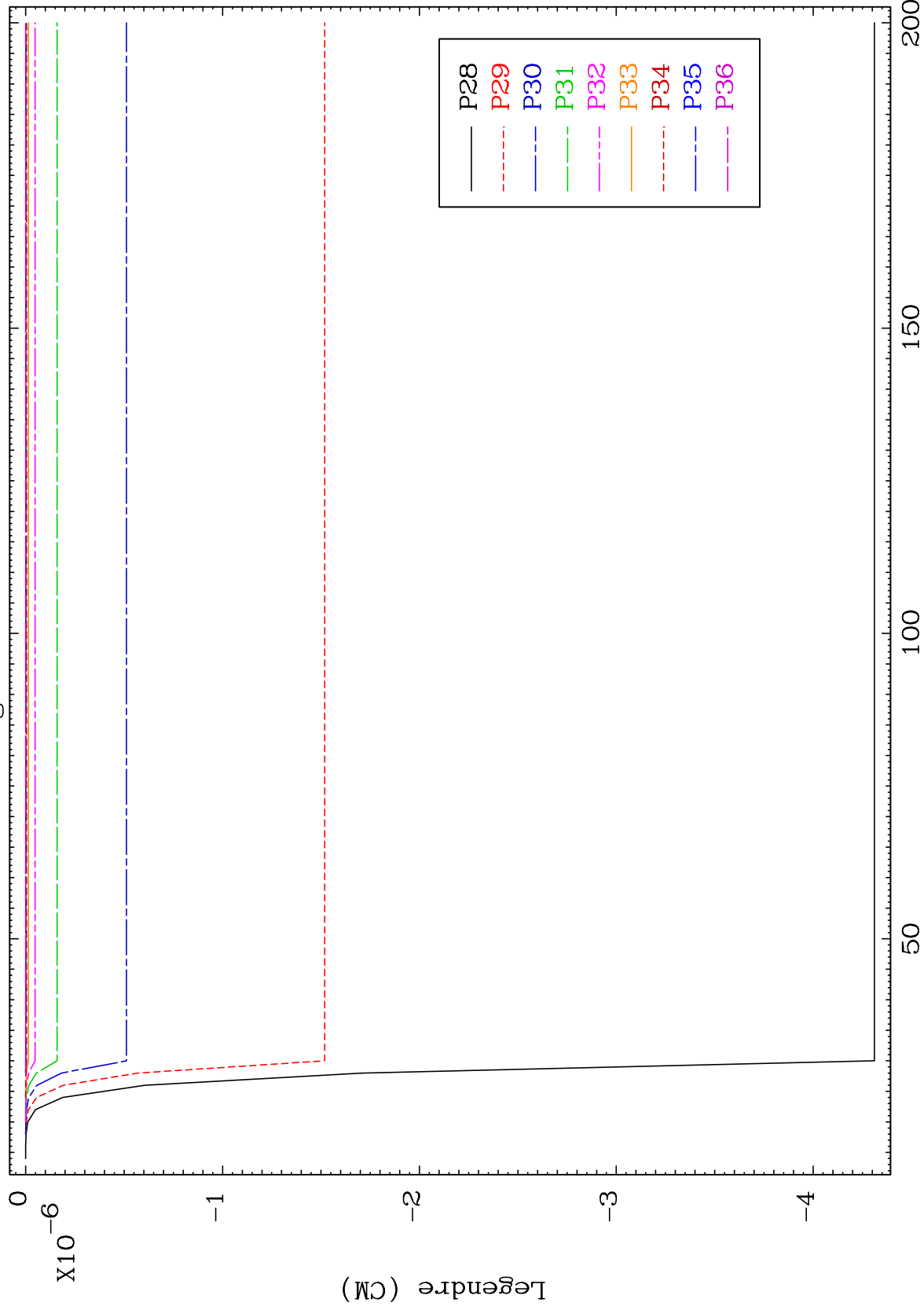
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 64 (n,n') Level
Legendre Coefficients

59-Pr-139



75

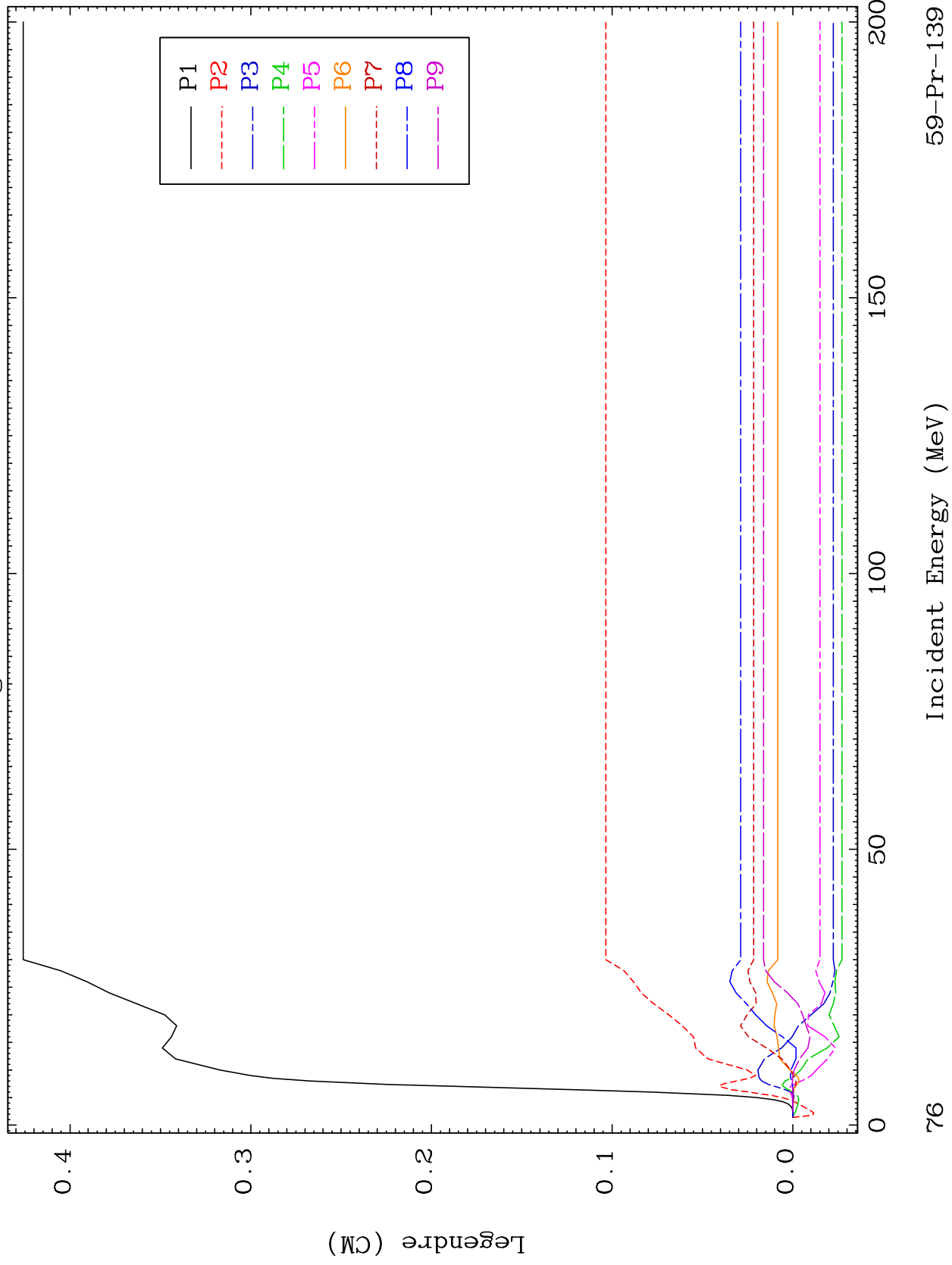
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 65 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

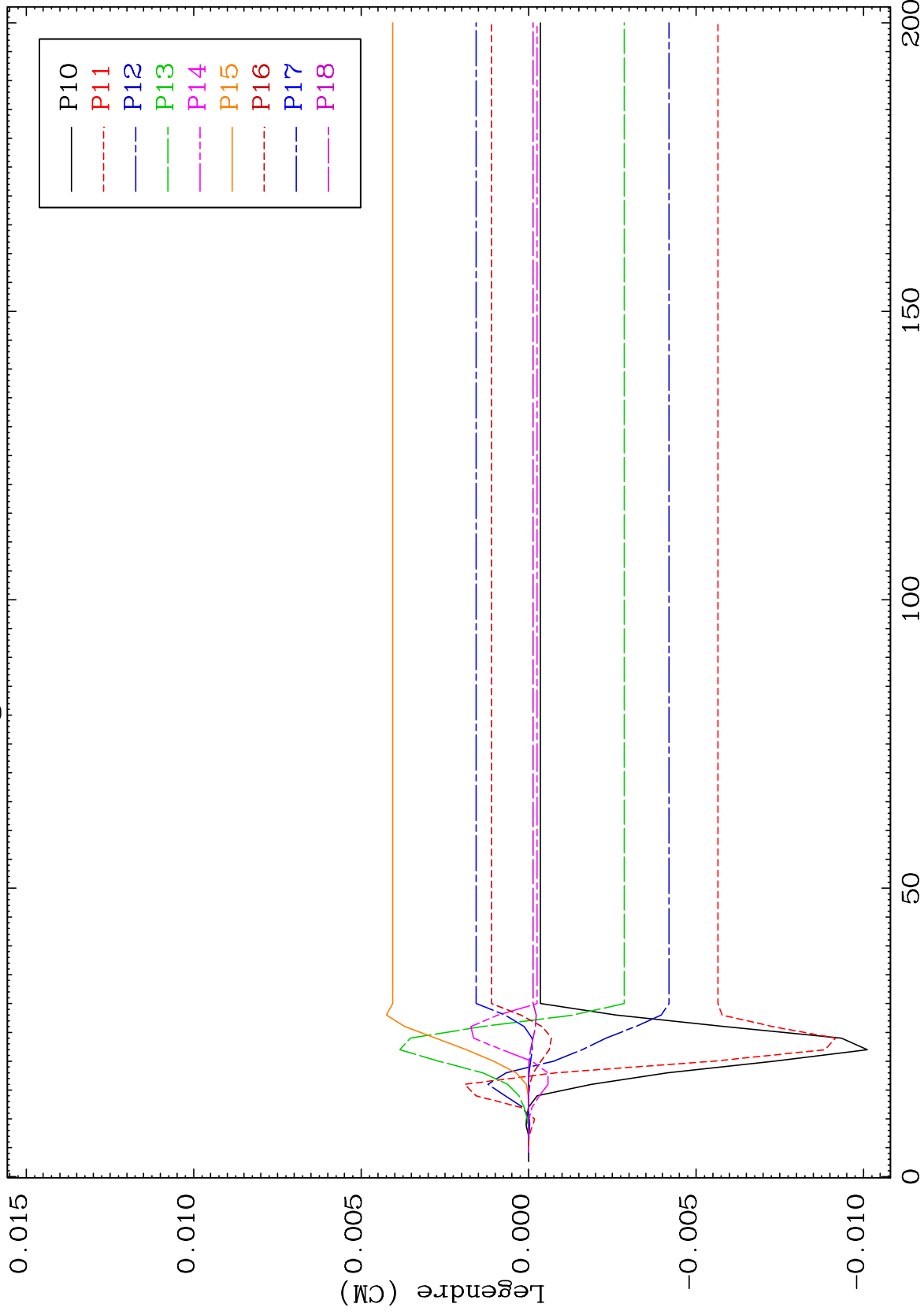
Incident Energy (MeV)

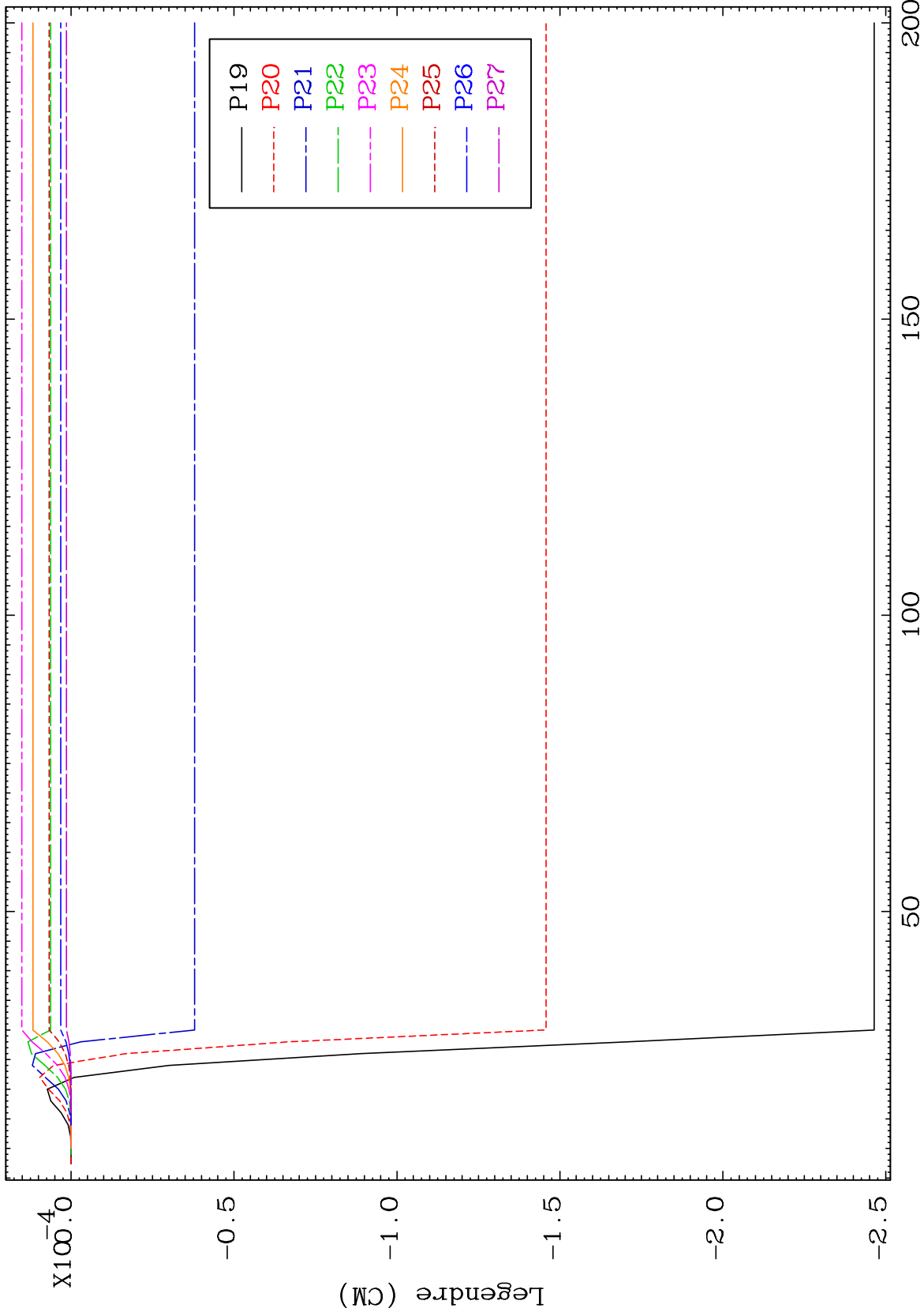
76

MAT 5919

MT= 65 (n,n') Level
Legendre Coefficients

59-Pr-139

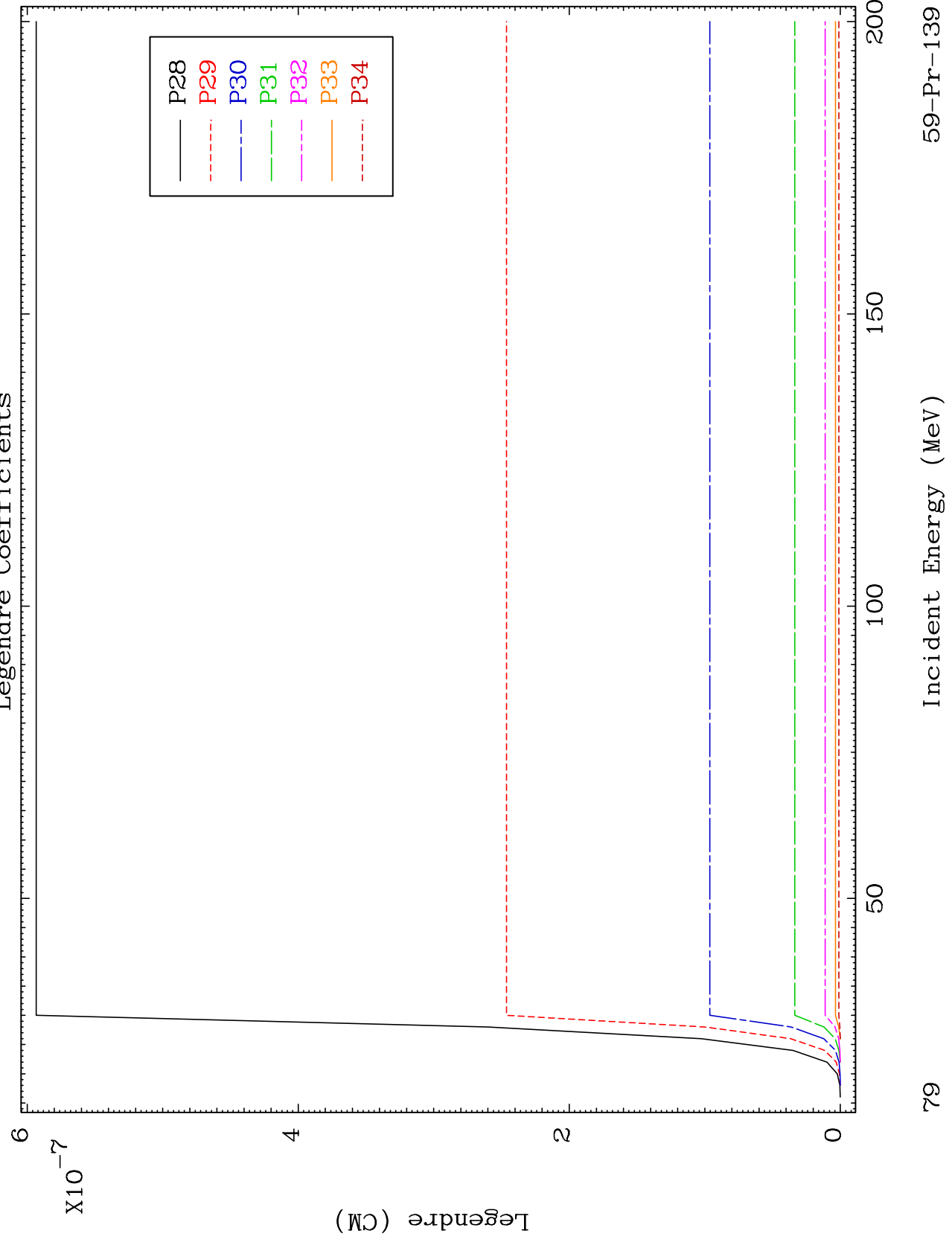




MAT 5919

MT= 65 (n,n') Level
Legendre Coefficients

59-Pr-139



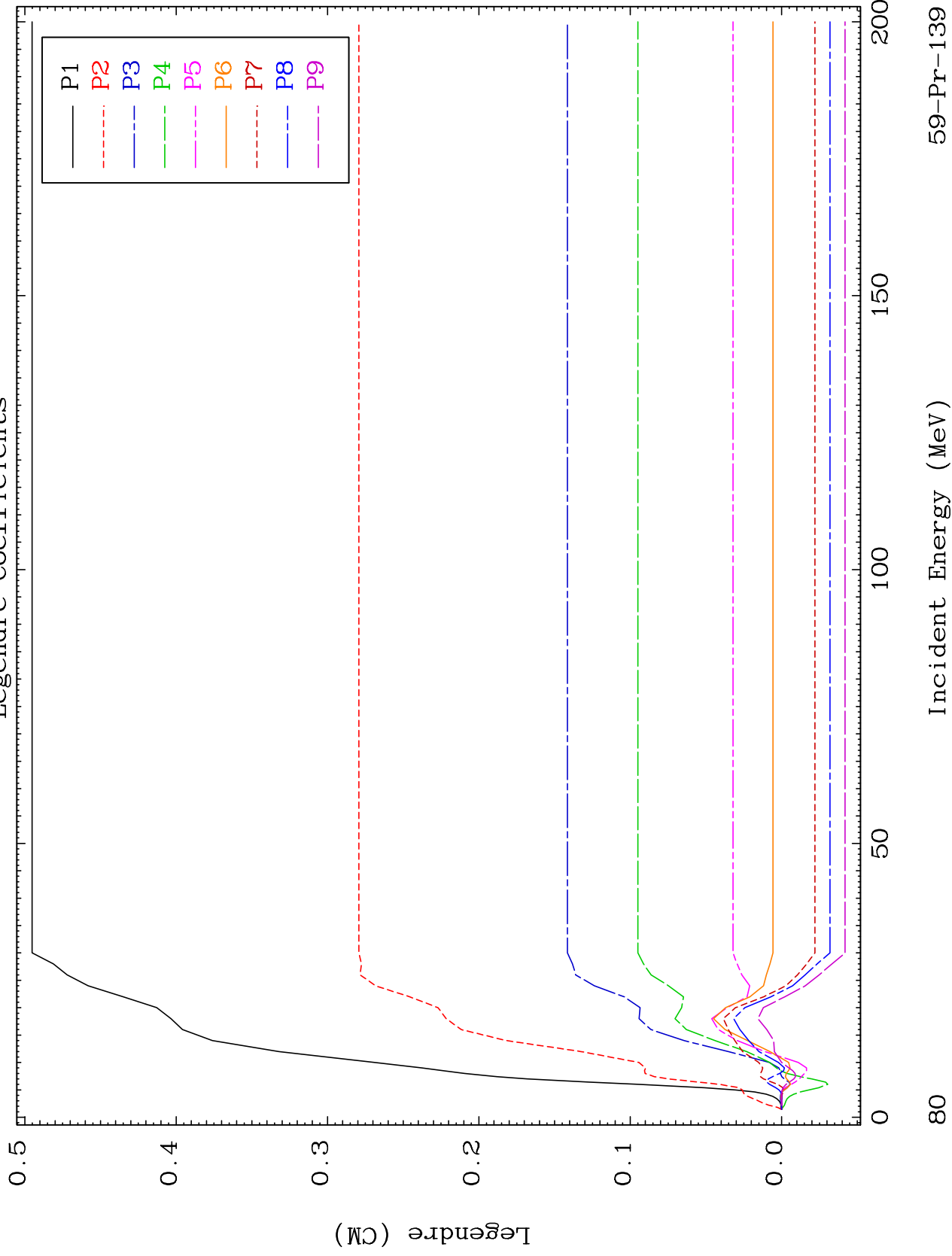
79

59-Pr-139

MAT 5919

MT= 66 (n,n') Level
Legendre Coefficients

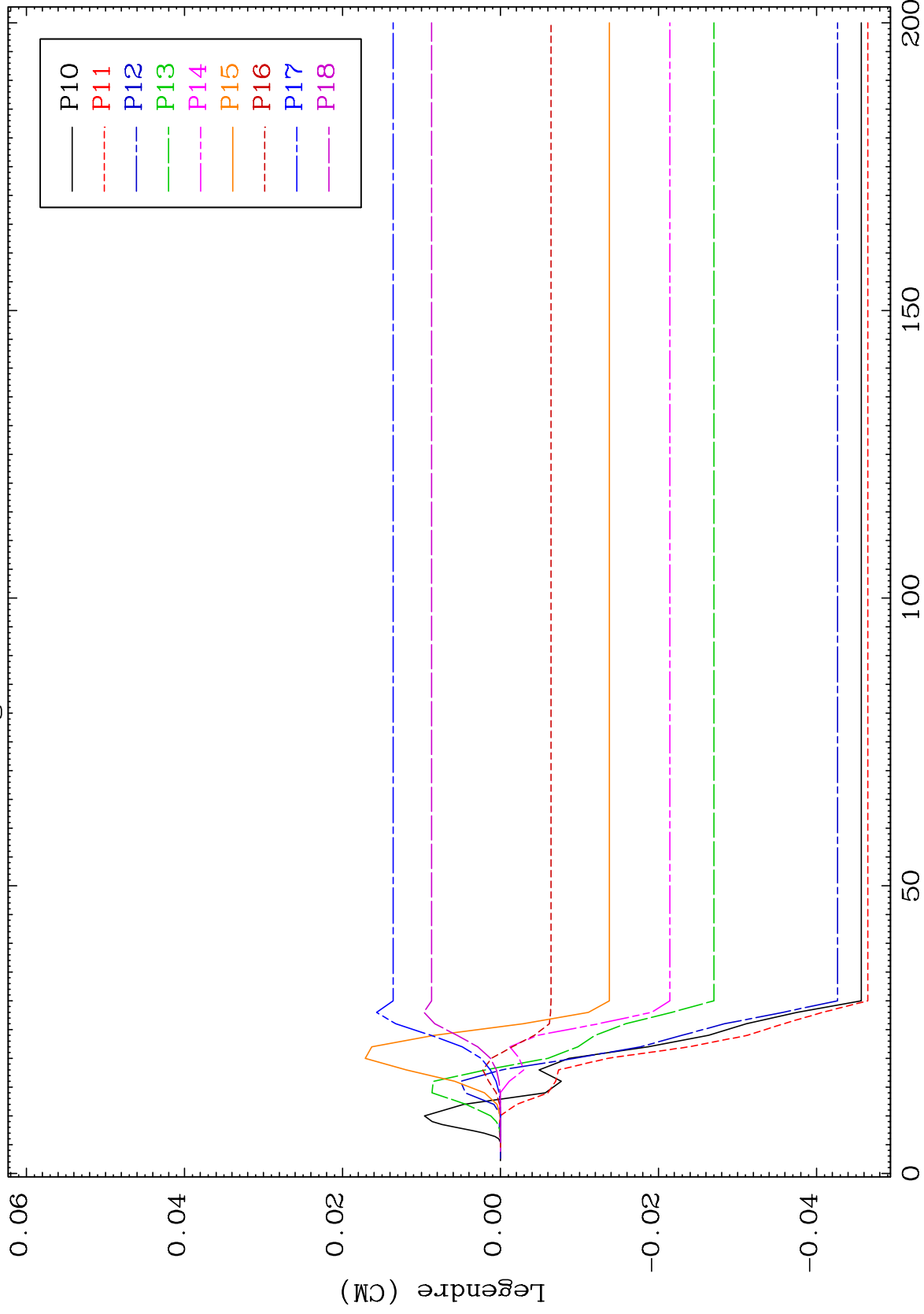
59-Pr-139



MAT 5919

MT= 66 (n,n') Level
Legendre Coefficients

59-Pr-139



81

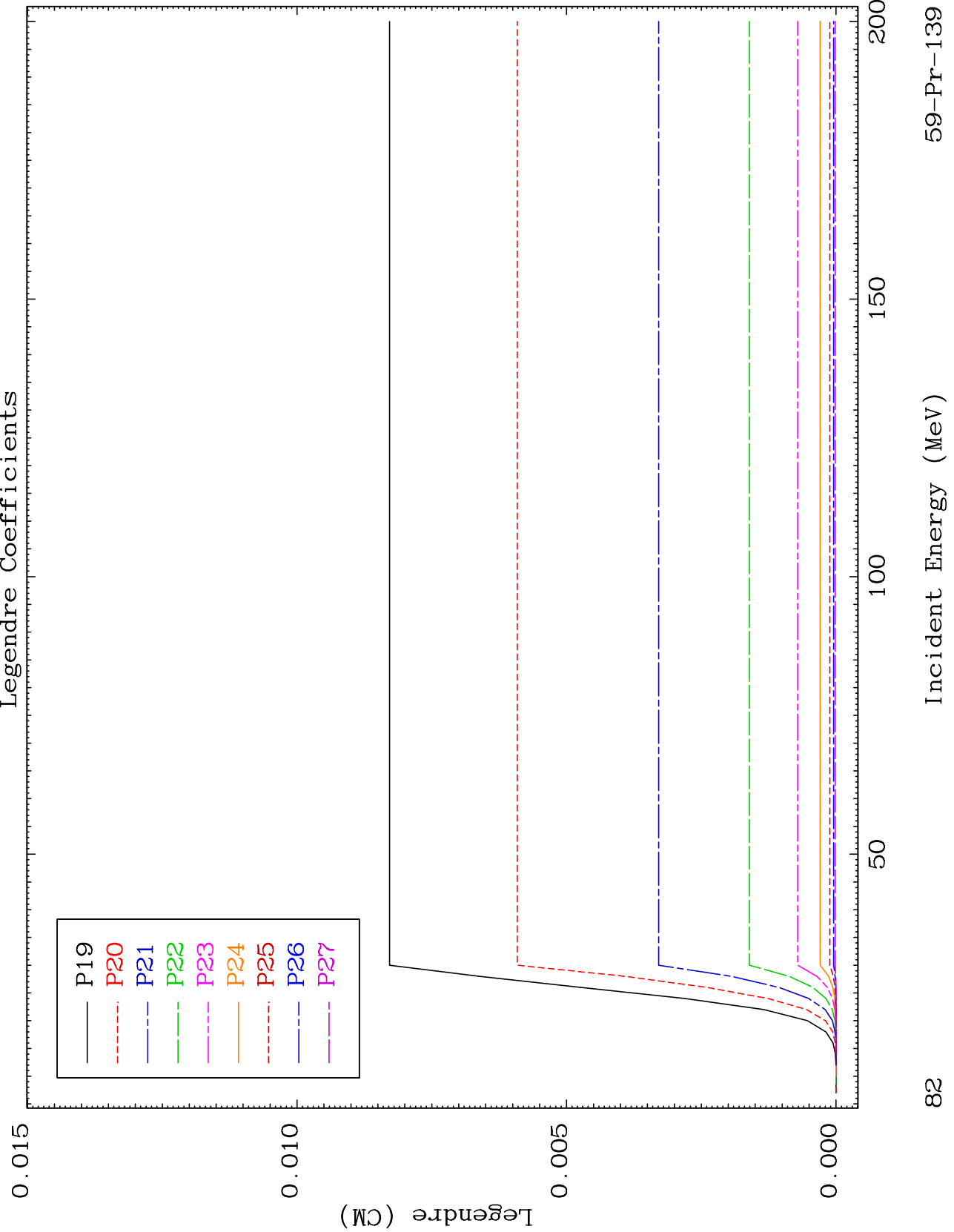
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 66 (n,n') Level
Legendre Coefficients

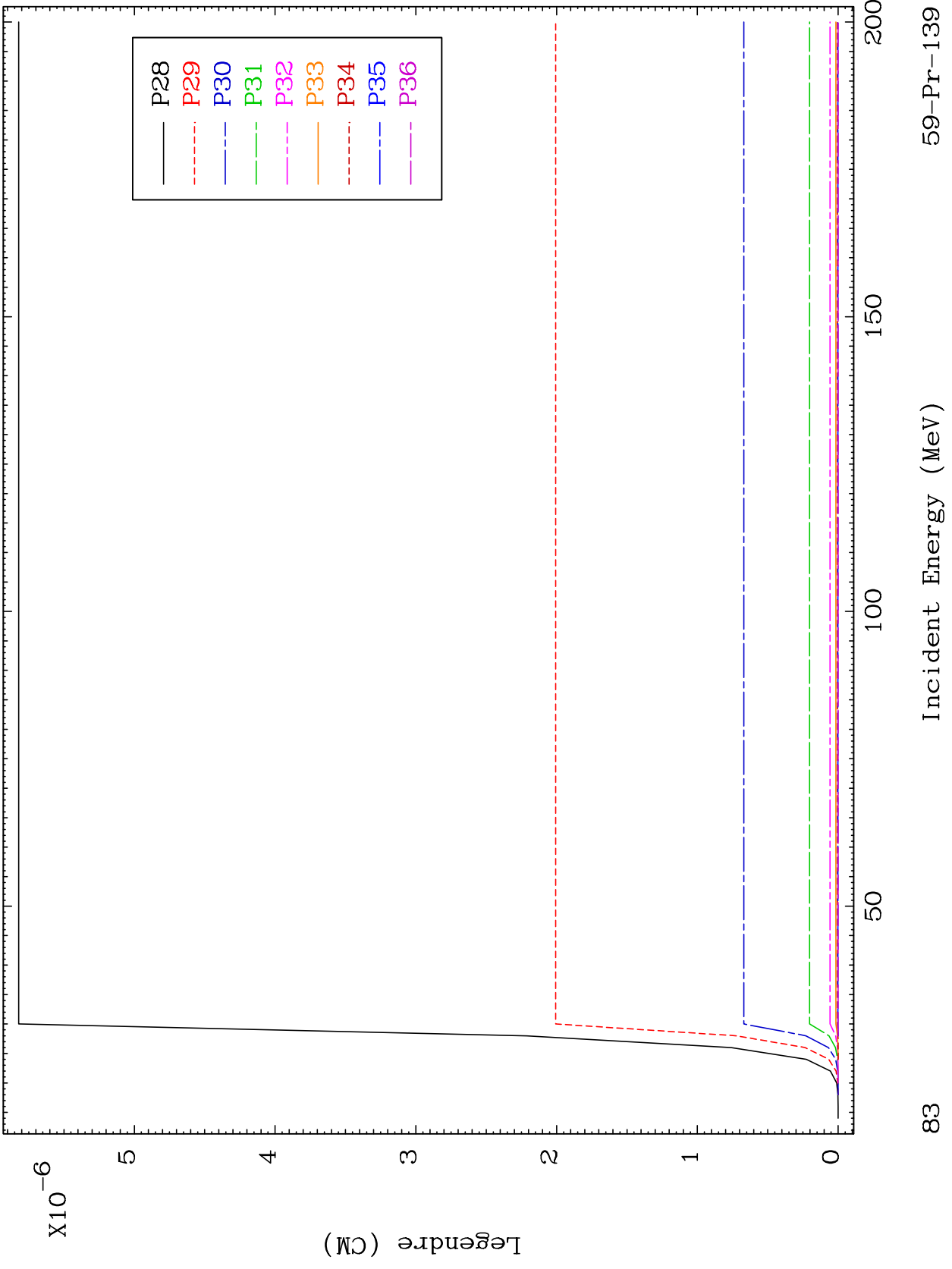
59-Pr-139



MAT 5919

MT= 66 (n,n') Level
Legendre Coefficients

59-Pr-139



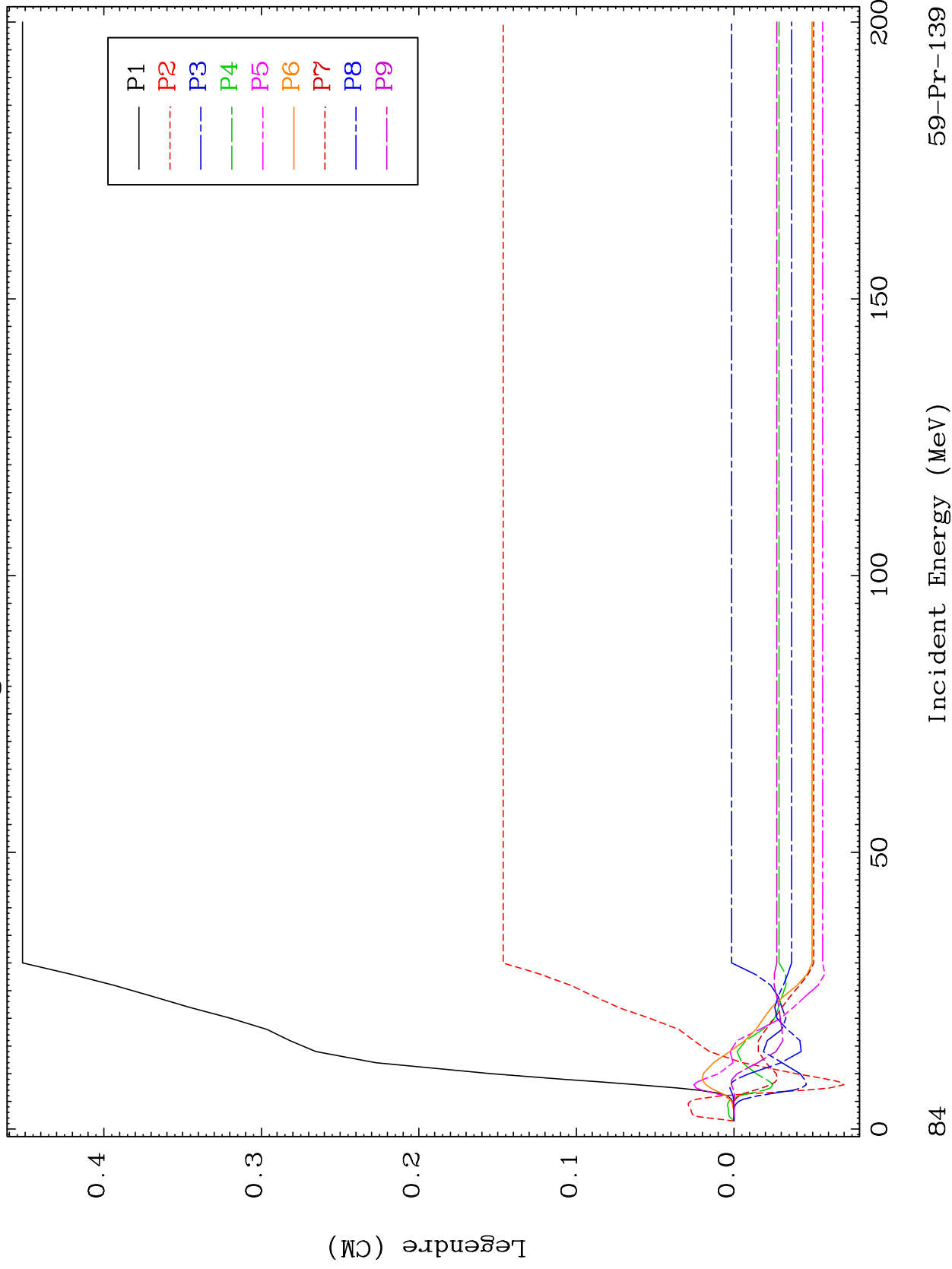
83

59-Pr-139

MAT 5919

MT= 67 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

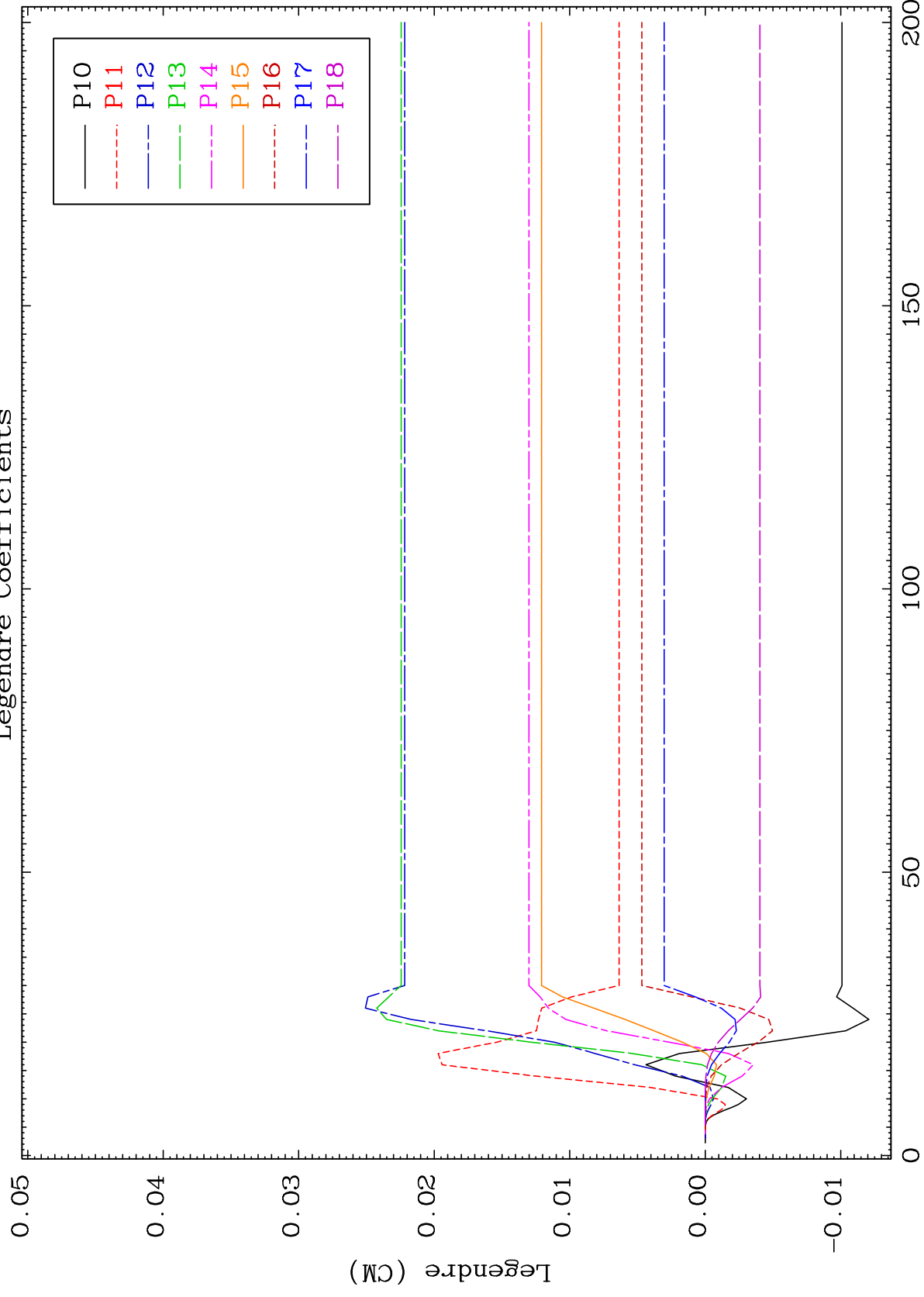
Incident Energy (MeV)

84

MAT 5919

MT= 67 (n,n') Level Legendre Coefficients

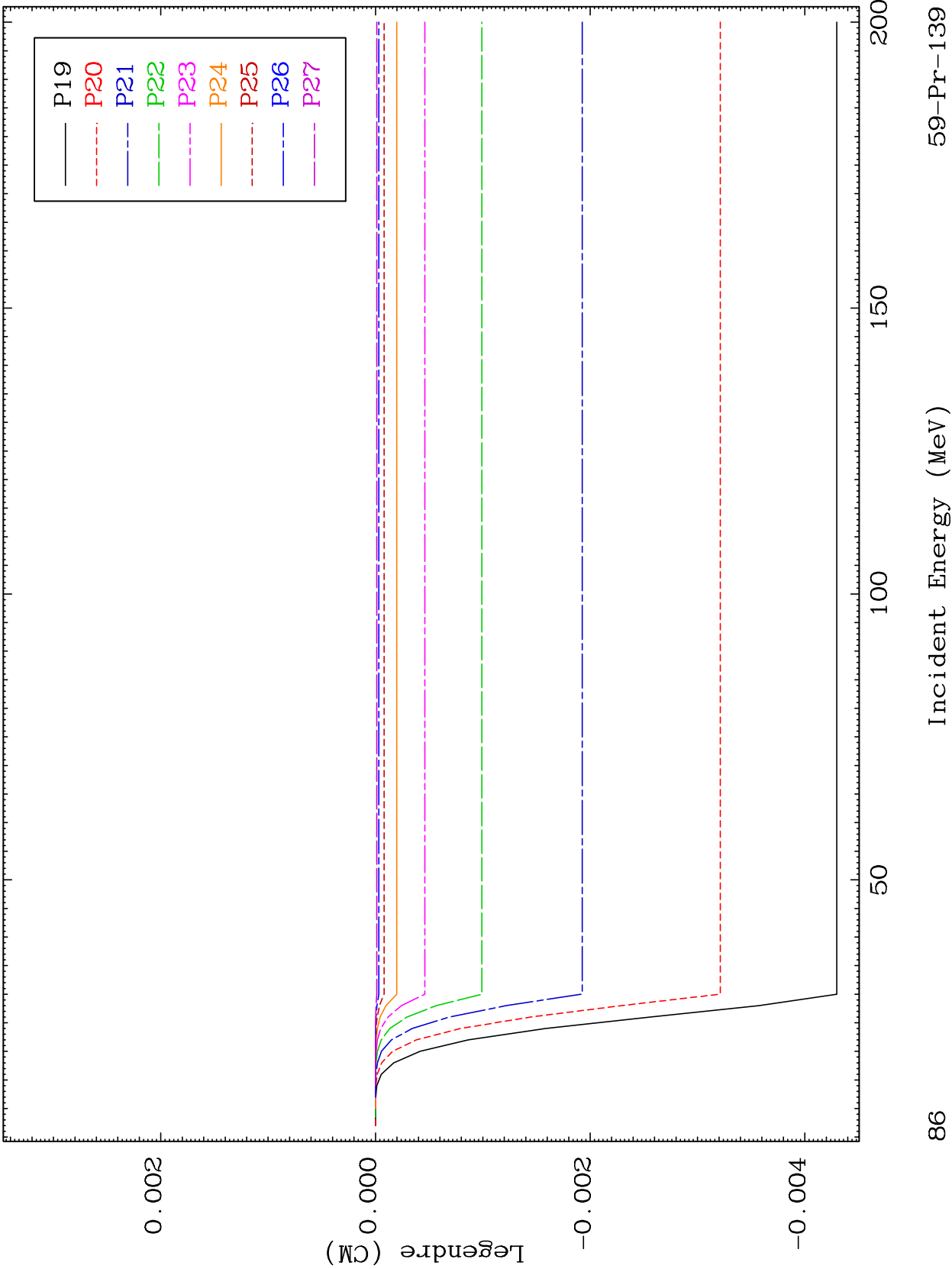
59-Pr-139



85

Incident Energy (MeV)

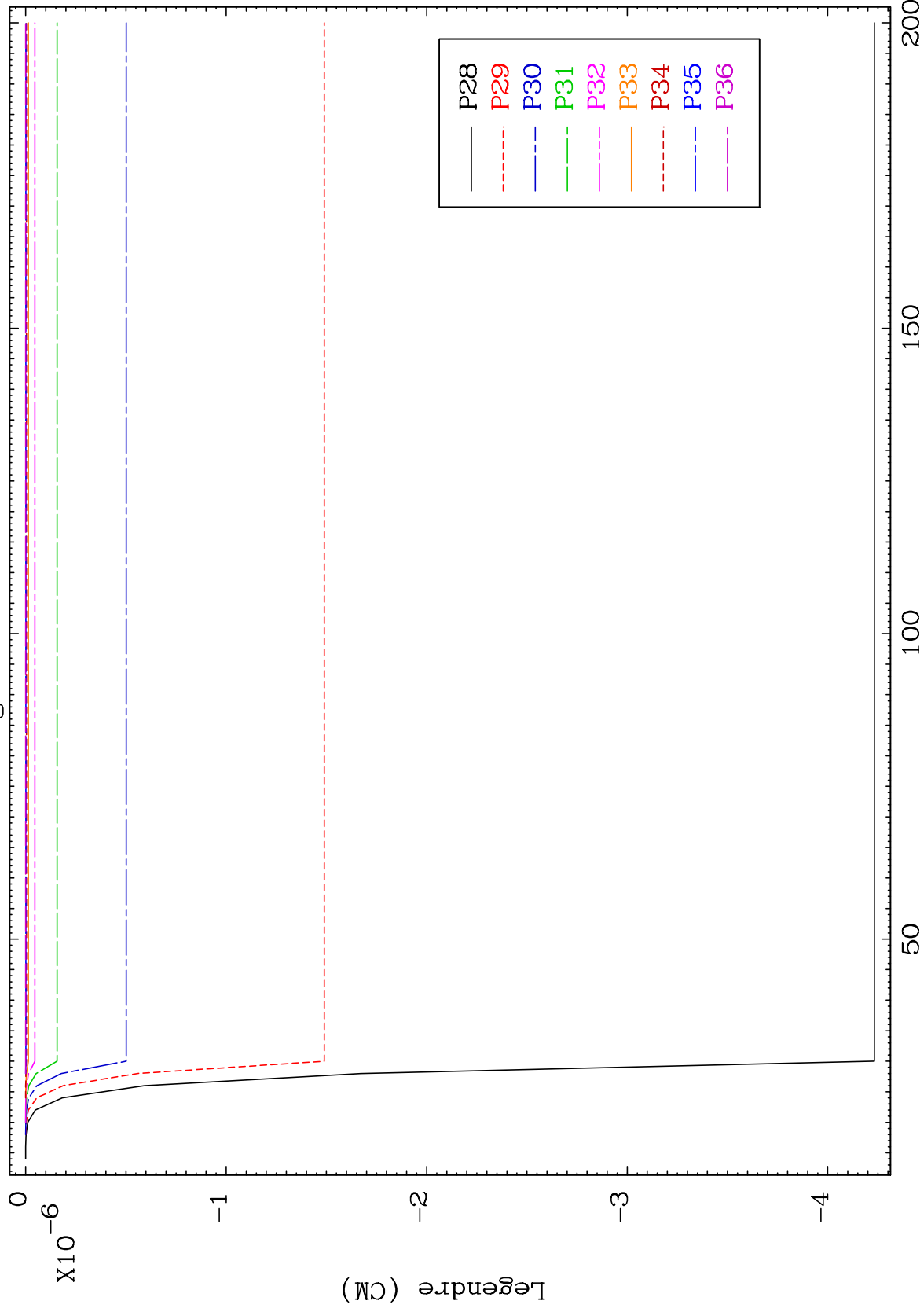
59-Pr-139



MAT 5919

MT= 67 (n,n') Level
Legendre Coefficients

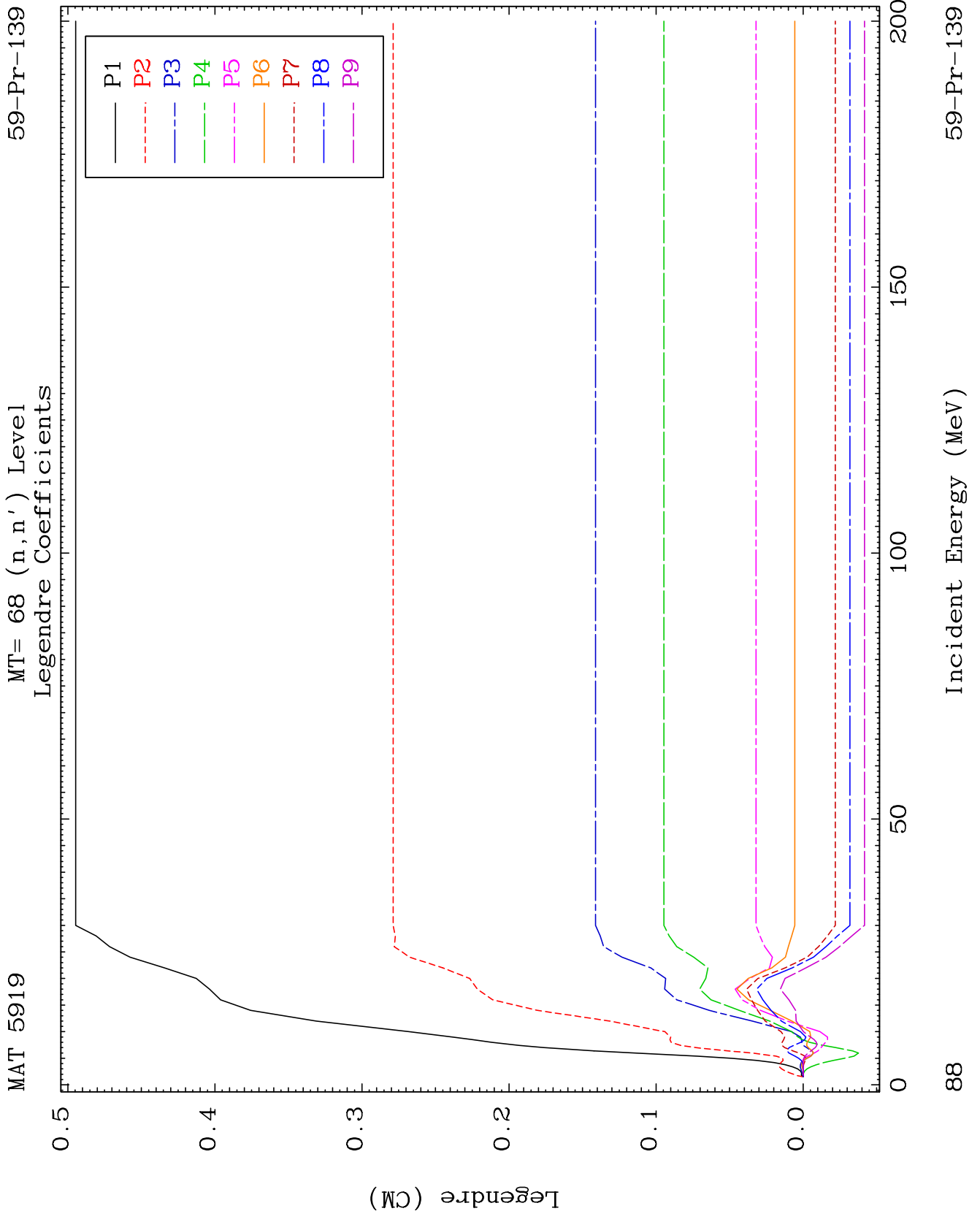
59-Pr-139



87

Incident Energy (MeV)

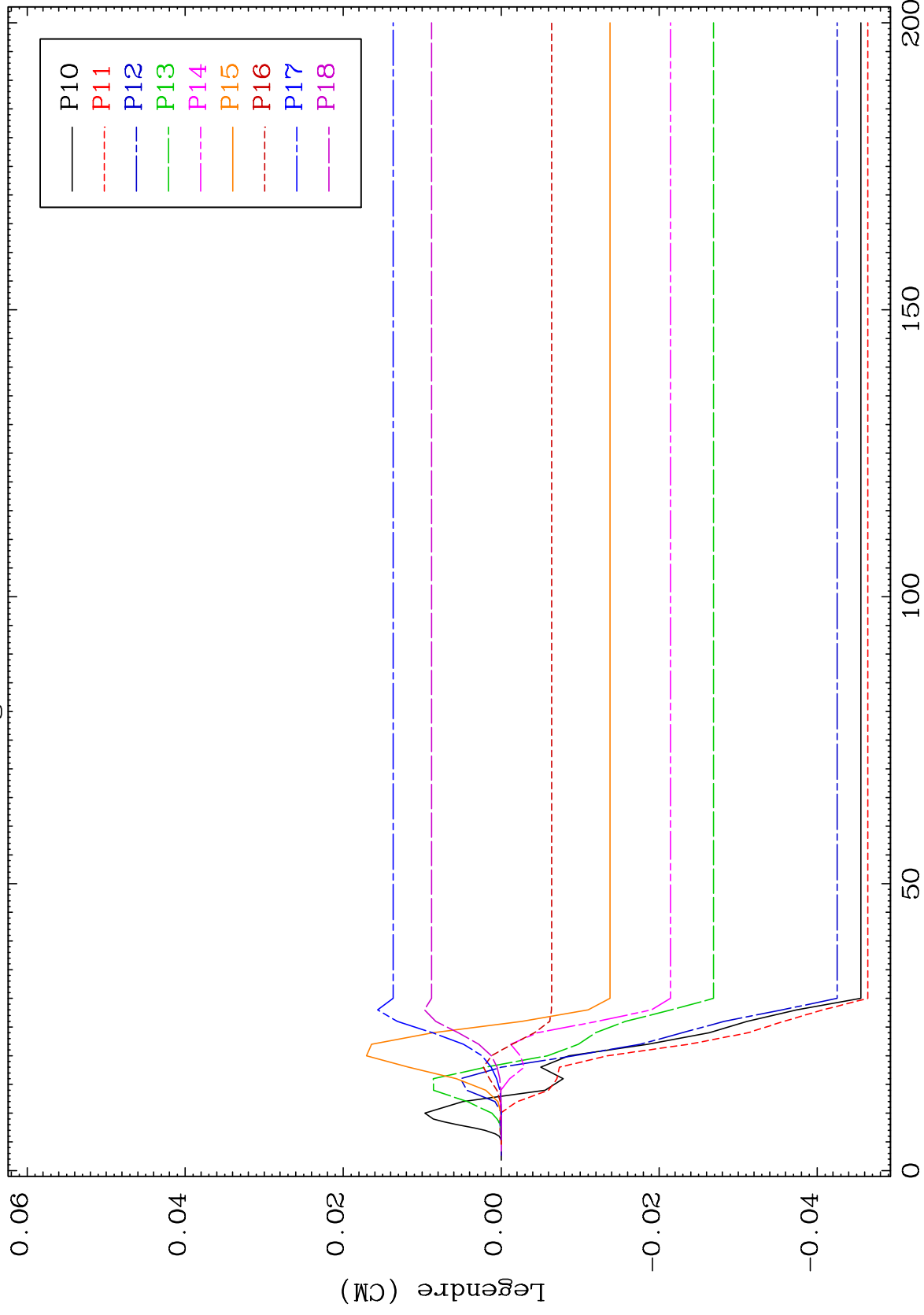
59-Pr-139



MAT 5919

MT= 68 (n,n') Level
Legendre Coefficients

59-Pr-139



89

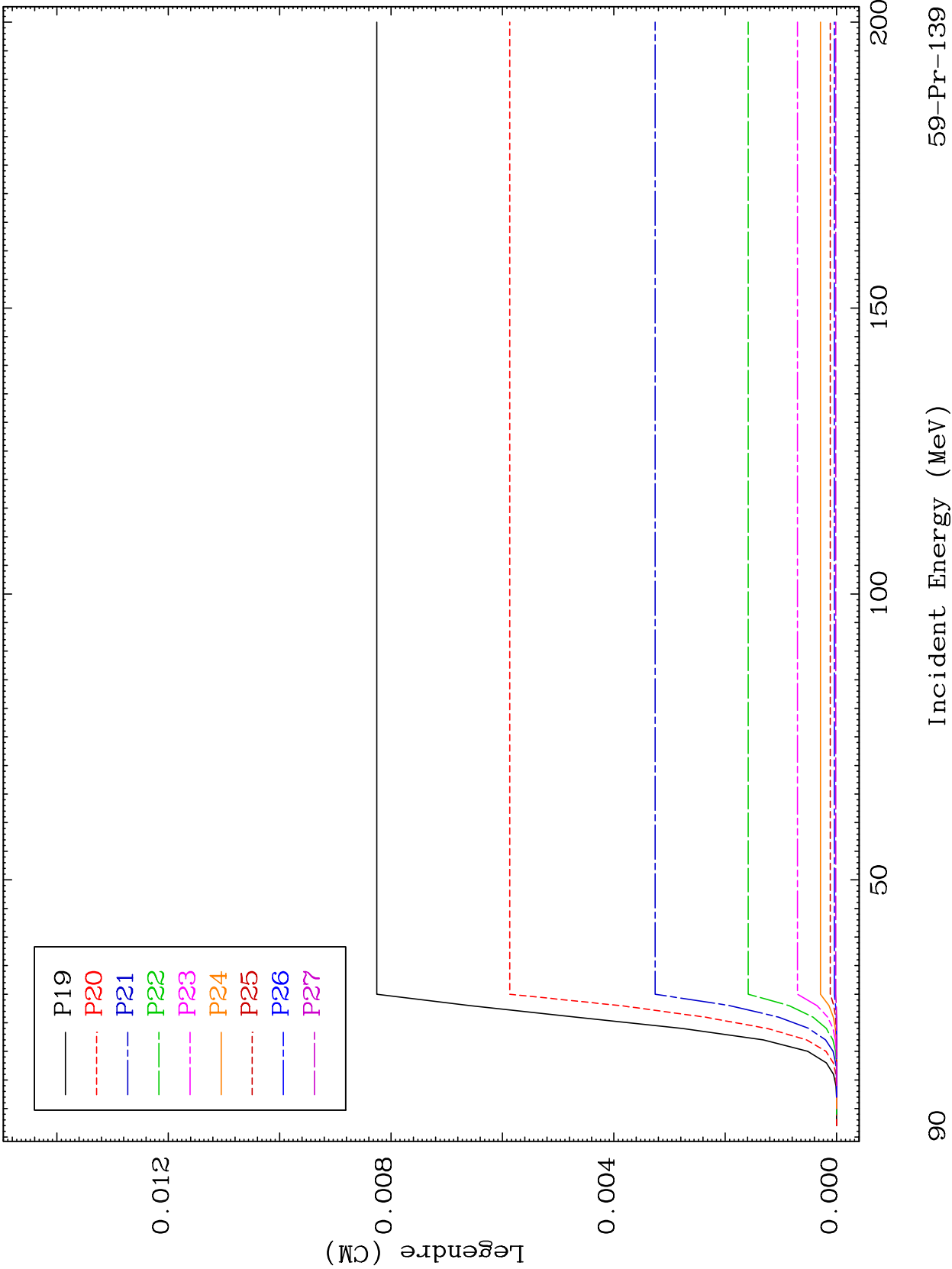
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 68 (n,n') Level
Legendre Coefficients

59-Pr-139



90

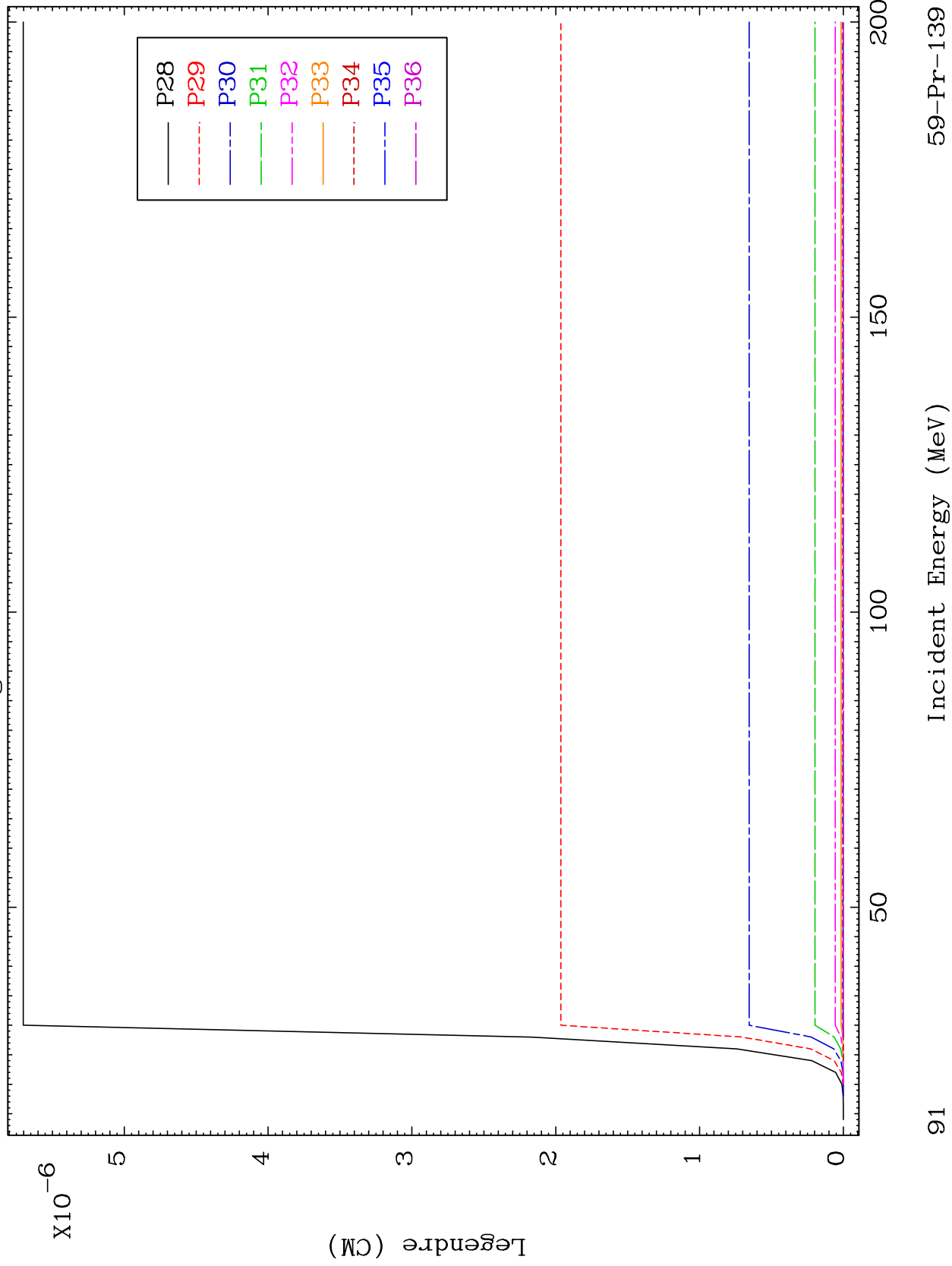
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 68 (n,n') Level
Legendre Coefficients

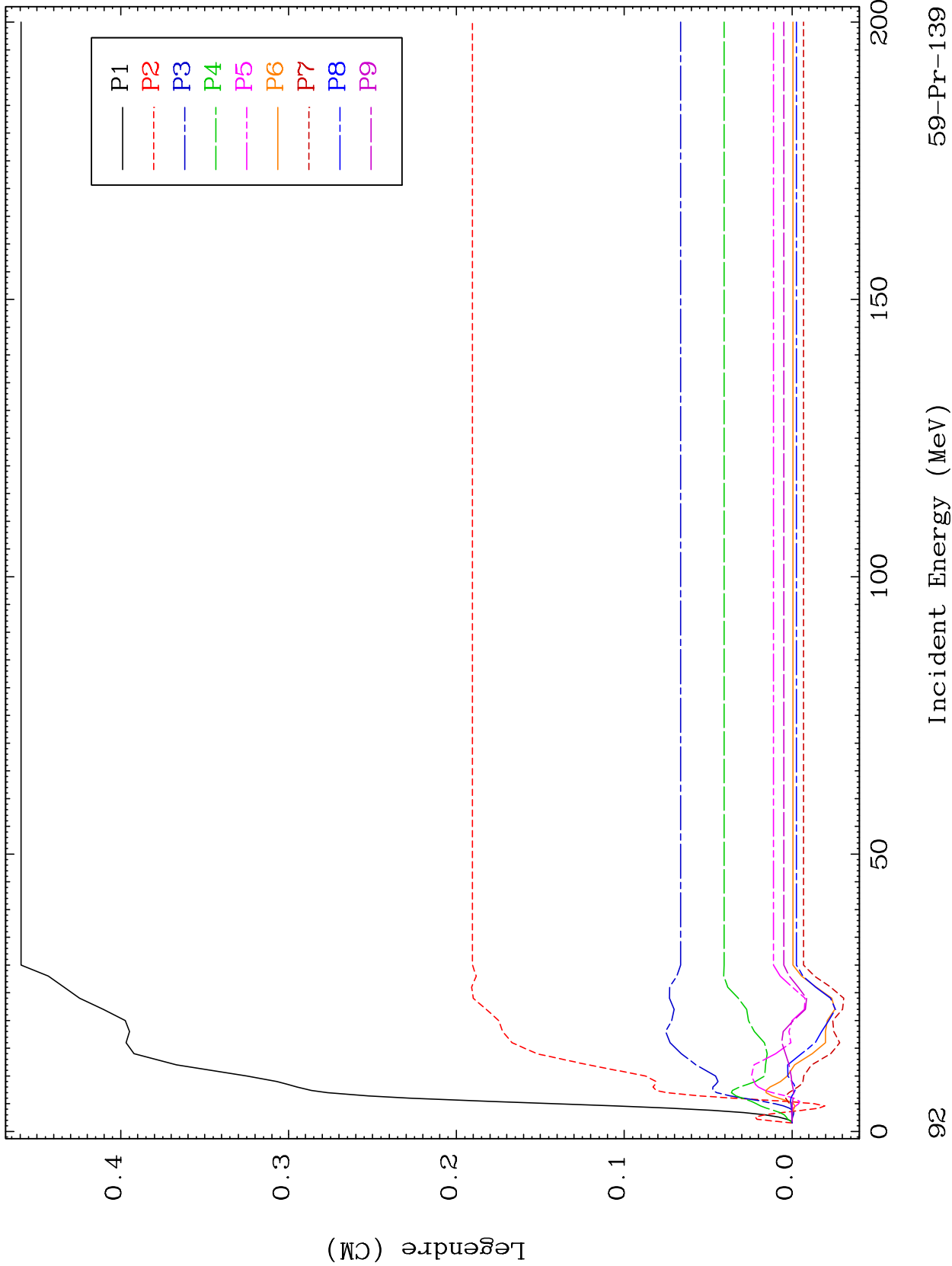
59-Pr-139



MAT 5919

MT= 69 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

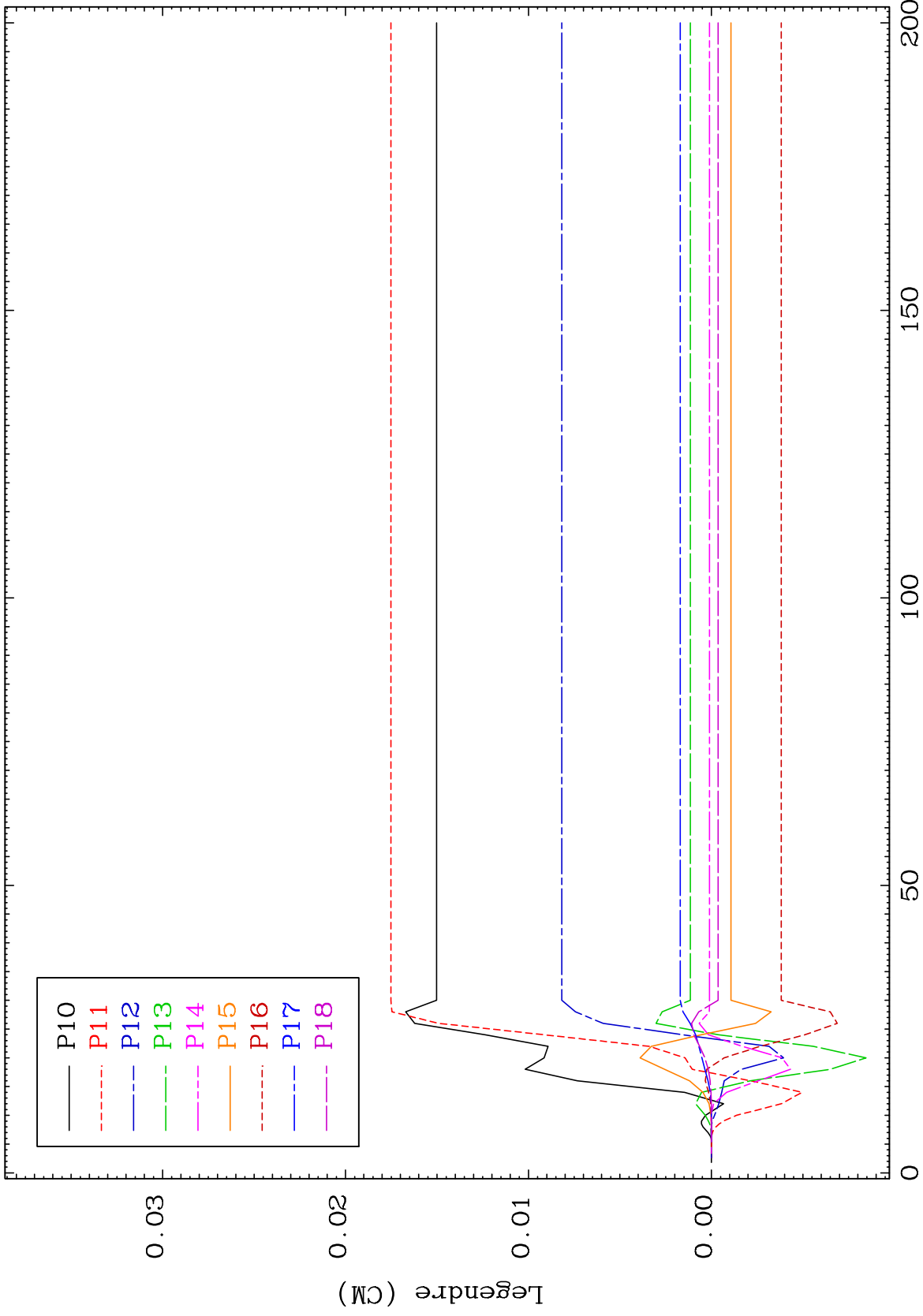
Incident Energy (MeV)

92

MAT 5919

MT= 69 (n,n') Level
Legendre Coefficients

59-Pr-139



93

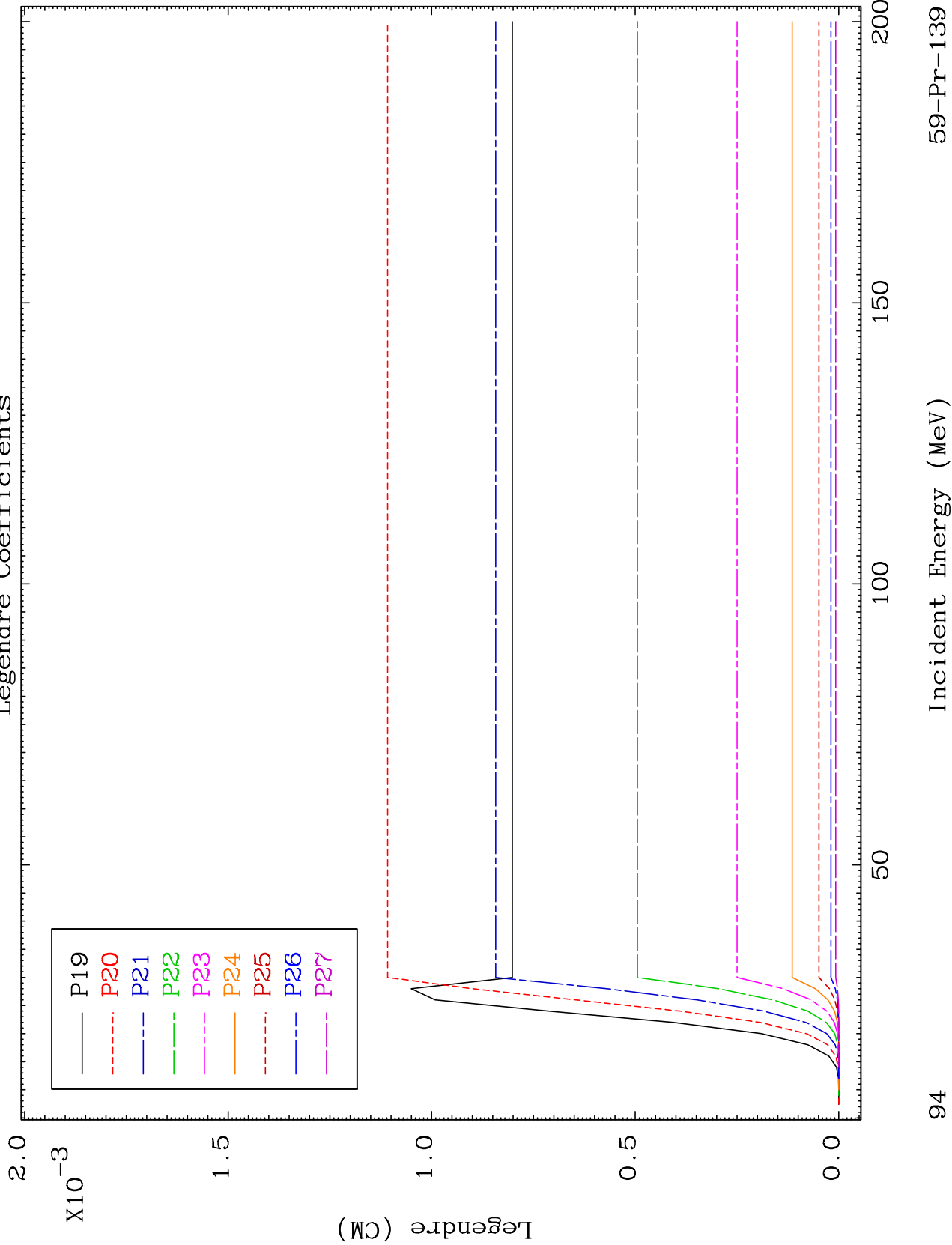
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 69 (n,n') Level
Legendre Coefficients

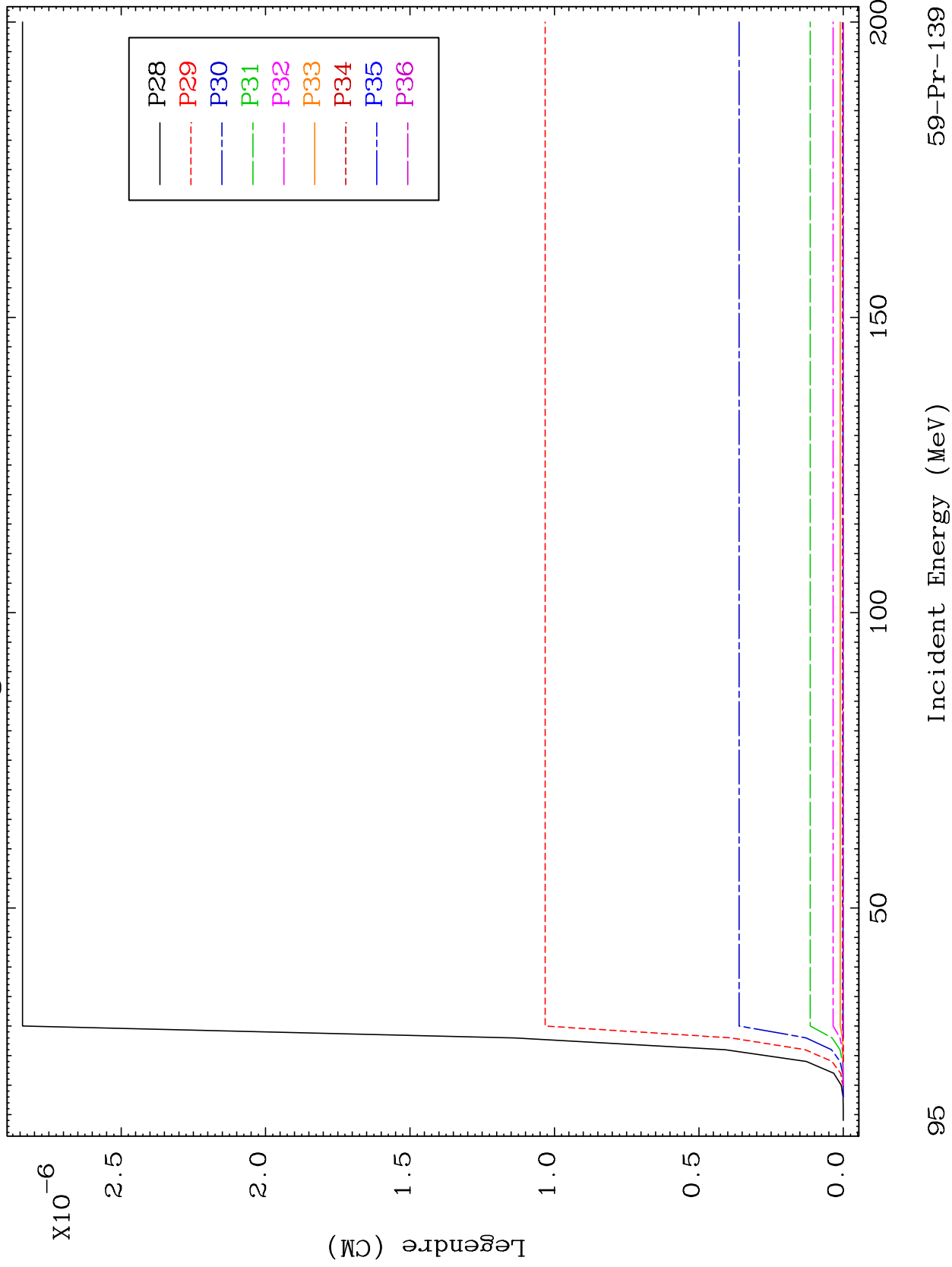
59-Pr-139



MAT 5919

MT= 69 (n,n') Level
Legendre Coefficients

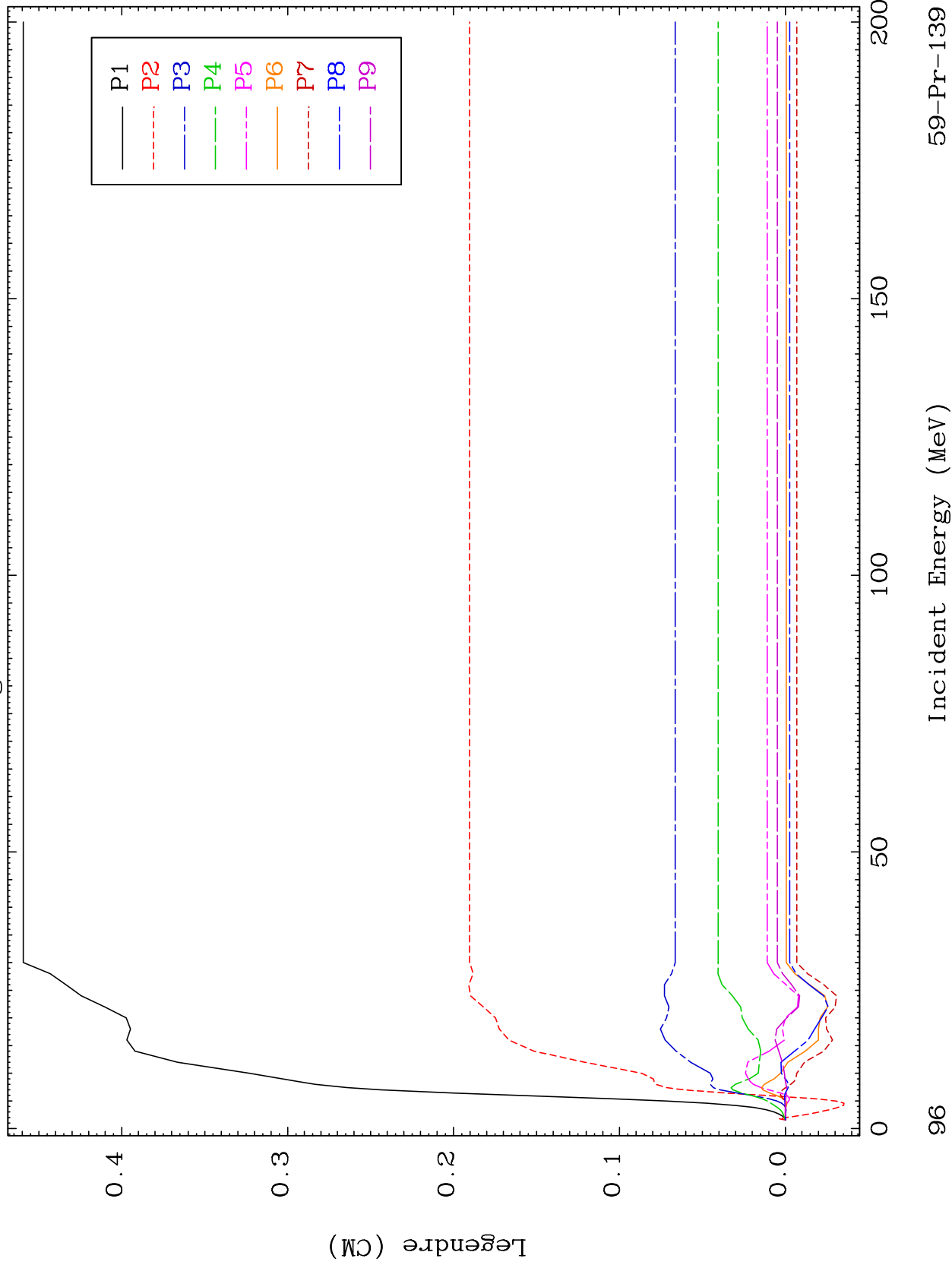
59-Pr-139



MAT 5919

MT= 70 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

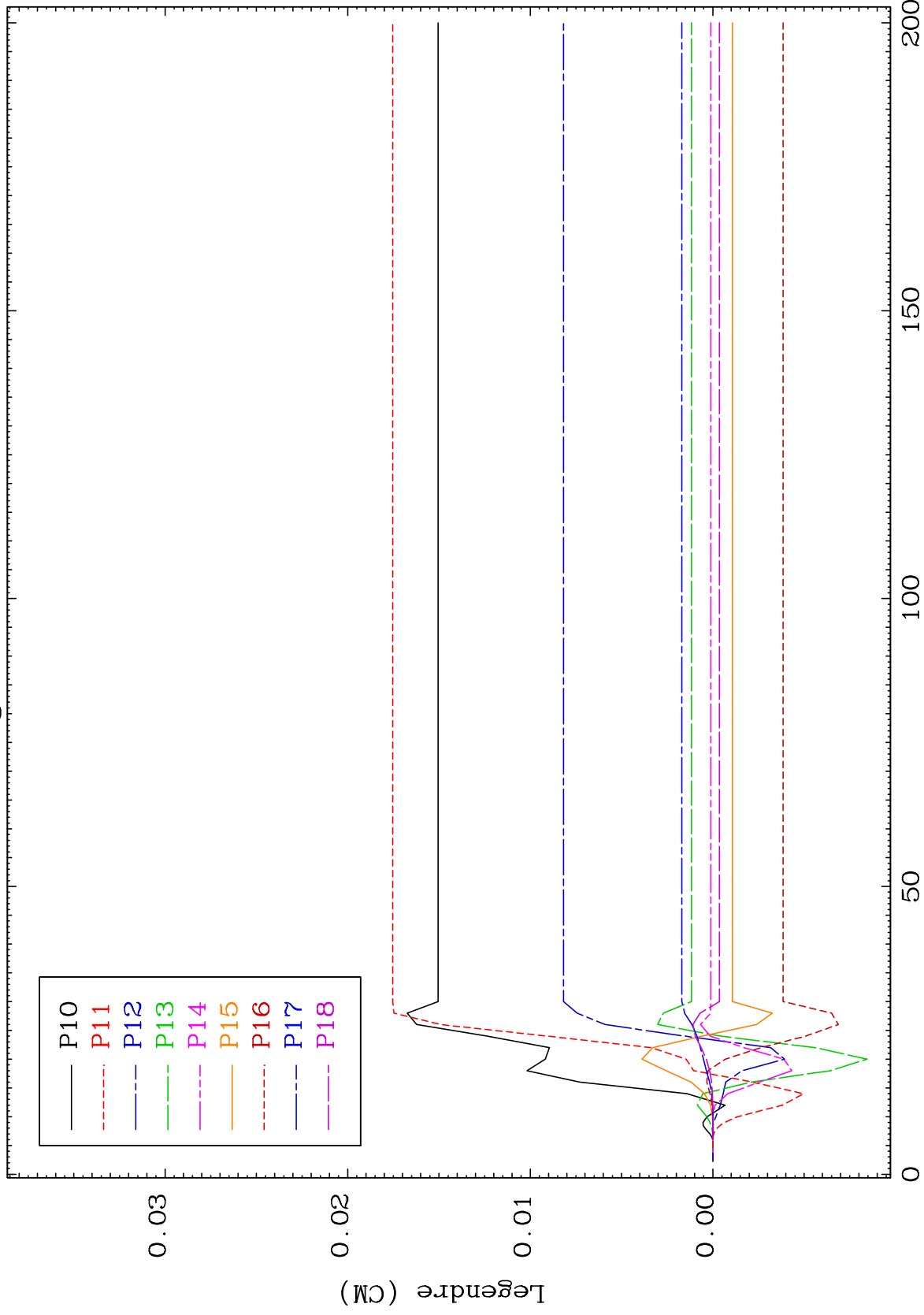
Incident Energy (MeV)

96

MAT 5919

59-Pr-139

MT= 70 (n,n') Level
Legendre Coefficients



97

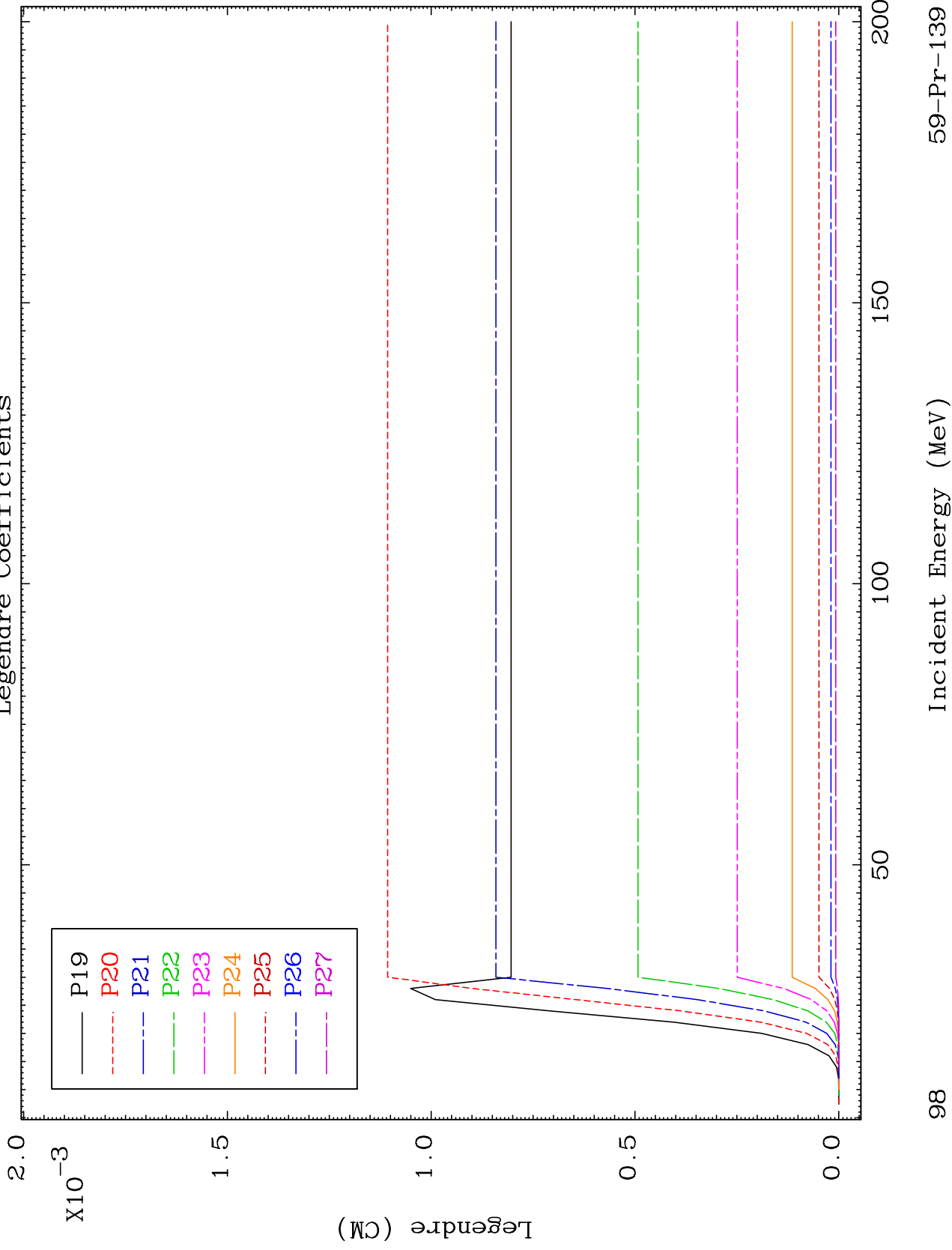
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 70 (n,n') Level
Legendre Coefficients

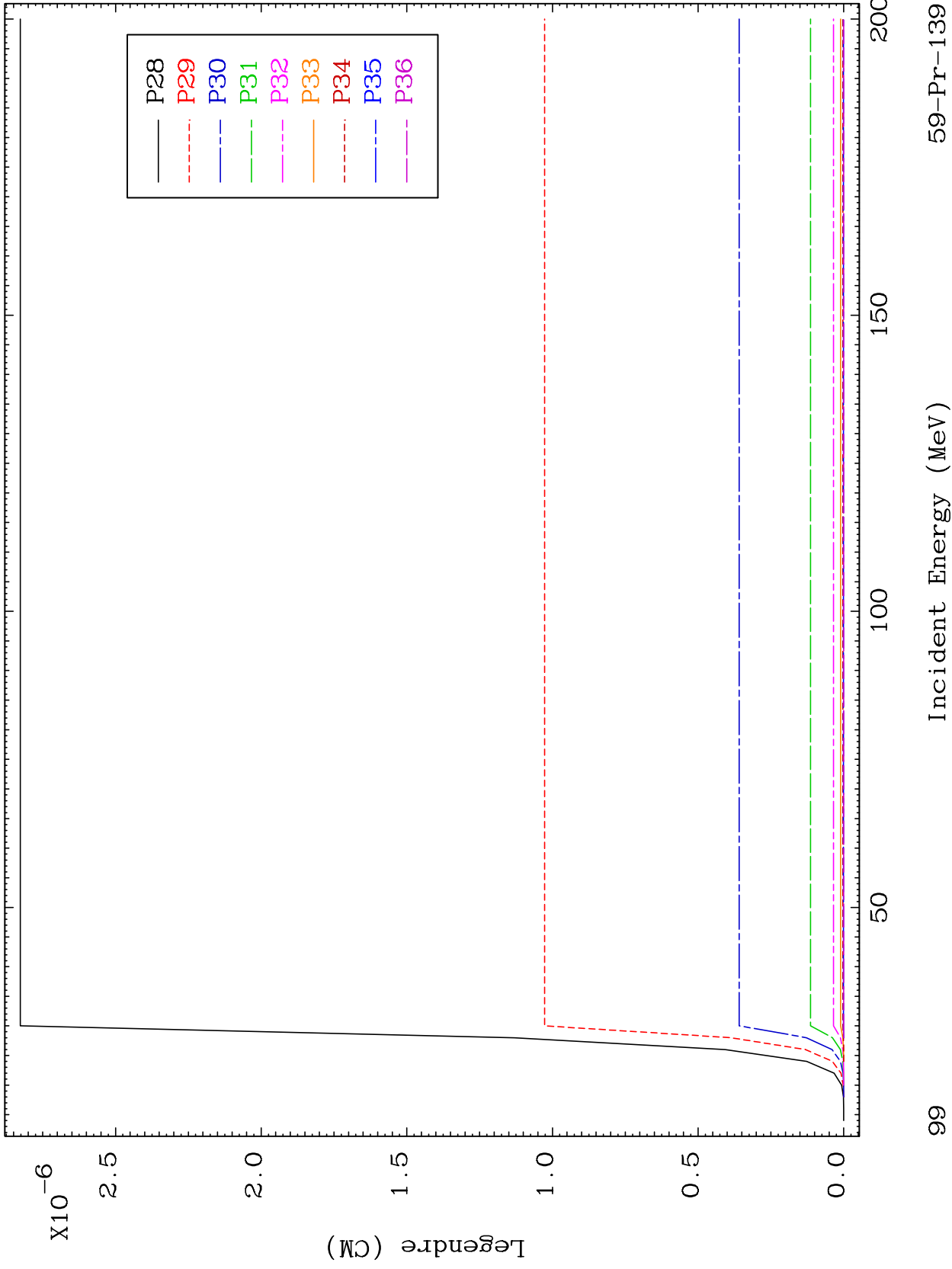
59-Pr-139

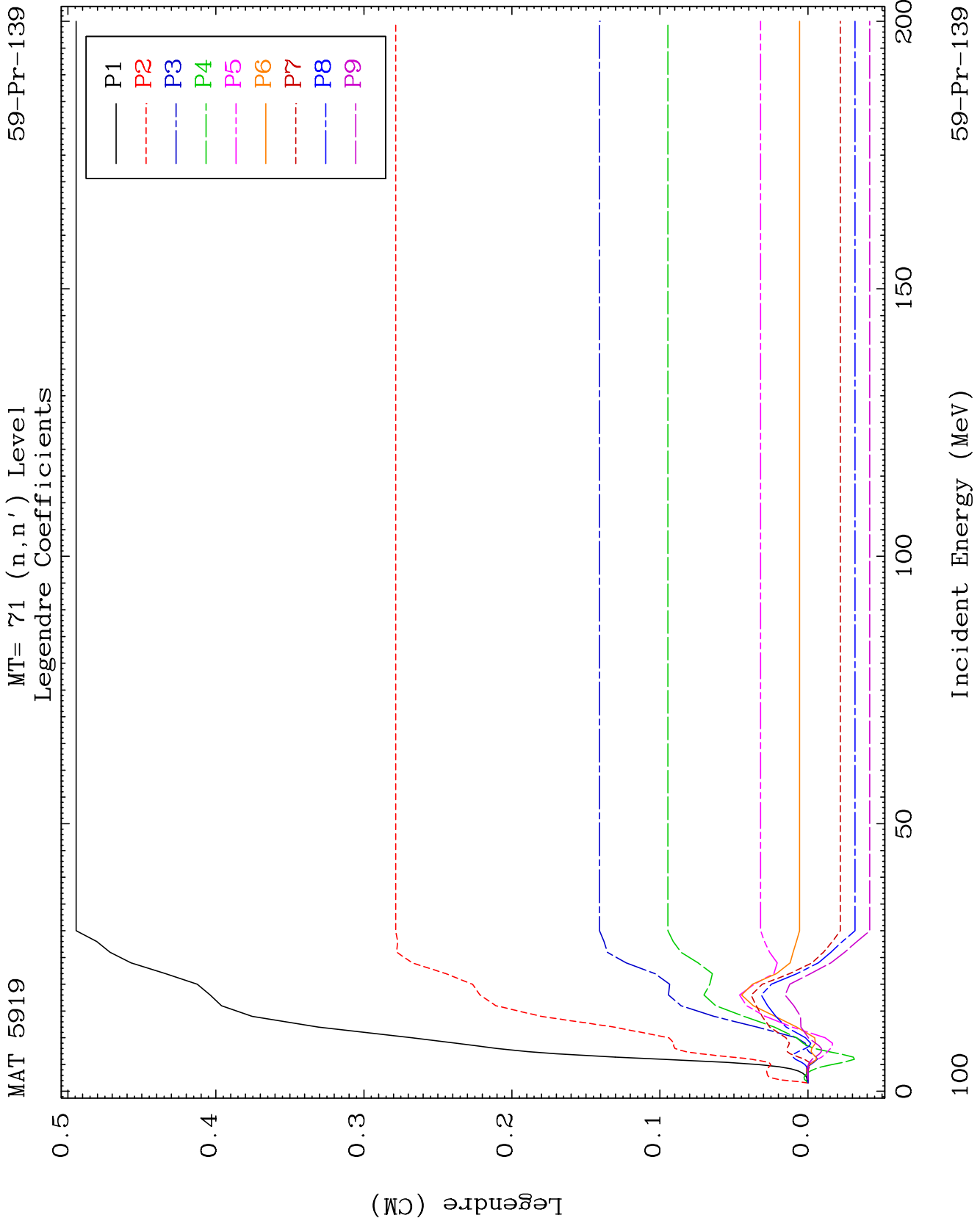


MAT 5919

MT= 70 (n,n') Level
Legendre Coefficients

59-Pr-139

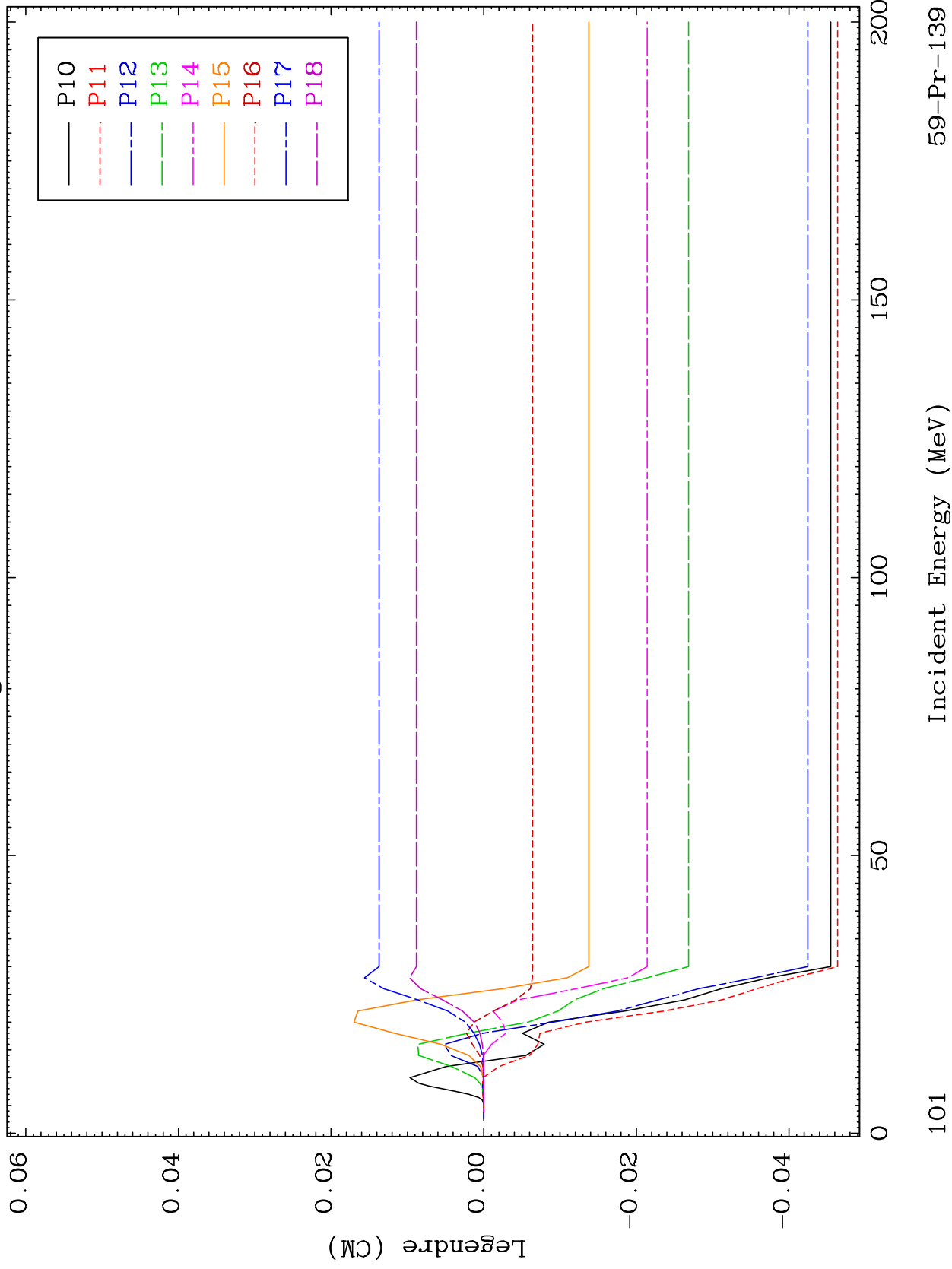




MAT 5919

MT= 71 (n,n') Level
Legendre Coefficients

59-Pr-139



101

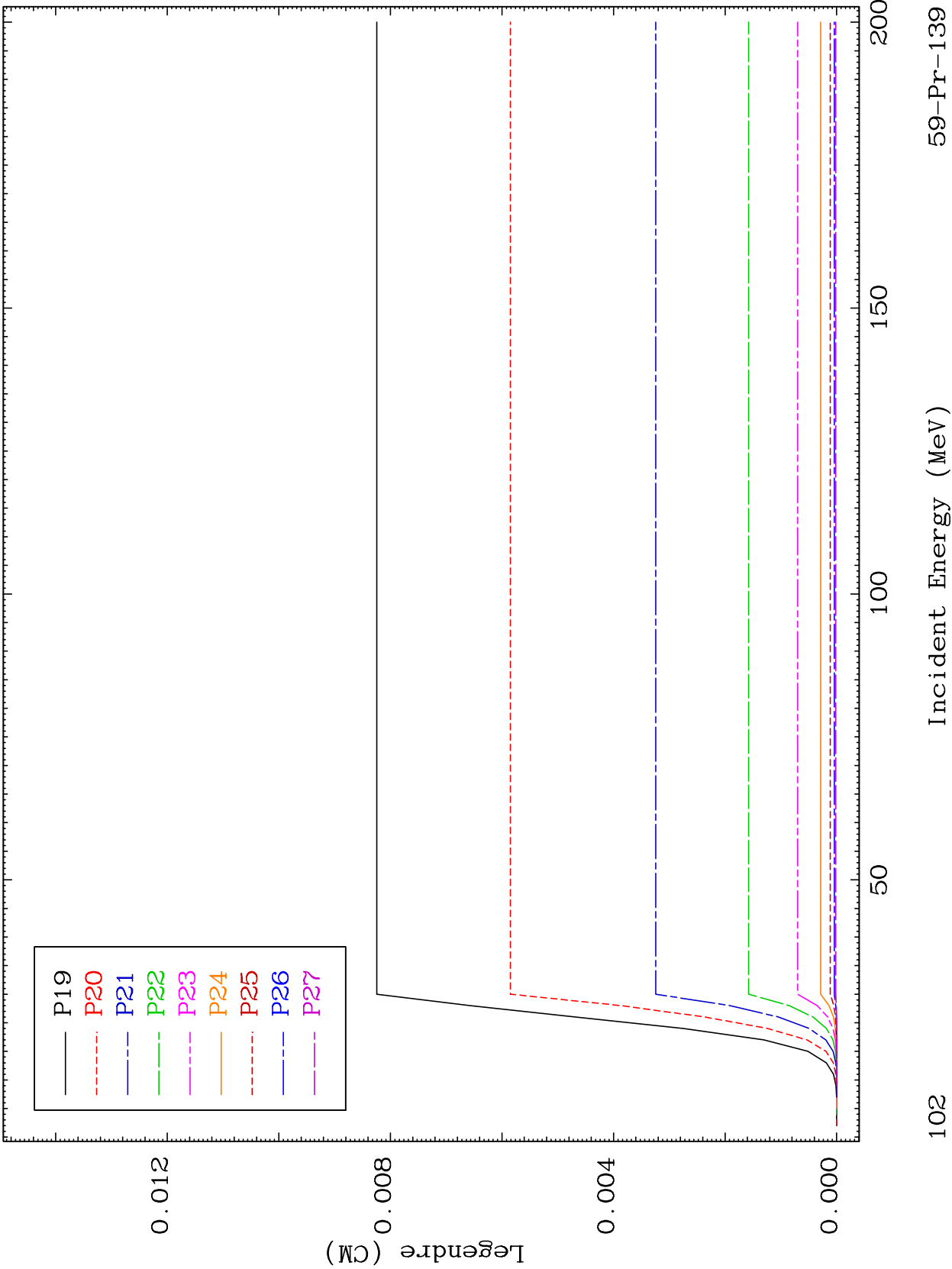
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 71 (n,n') Level
Legendre Coefficients

59-Pr-139



102

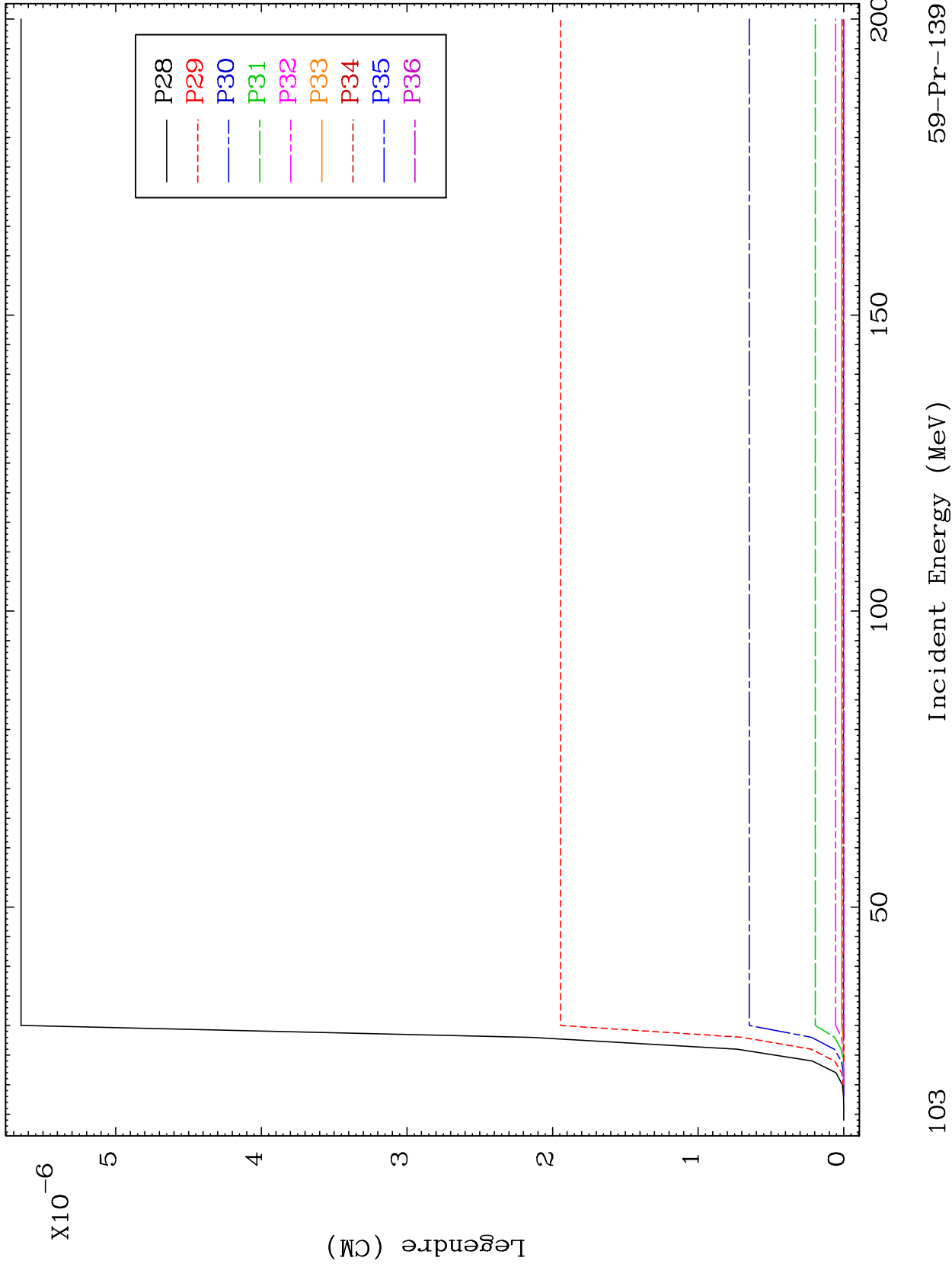
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 71 (n,n') Level
Legendre Coefficients

59-Pr-139



103

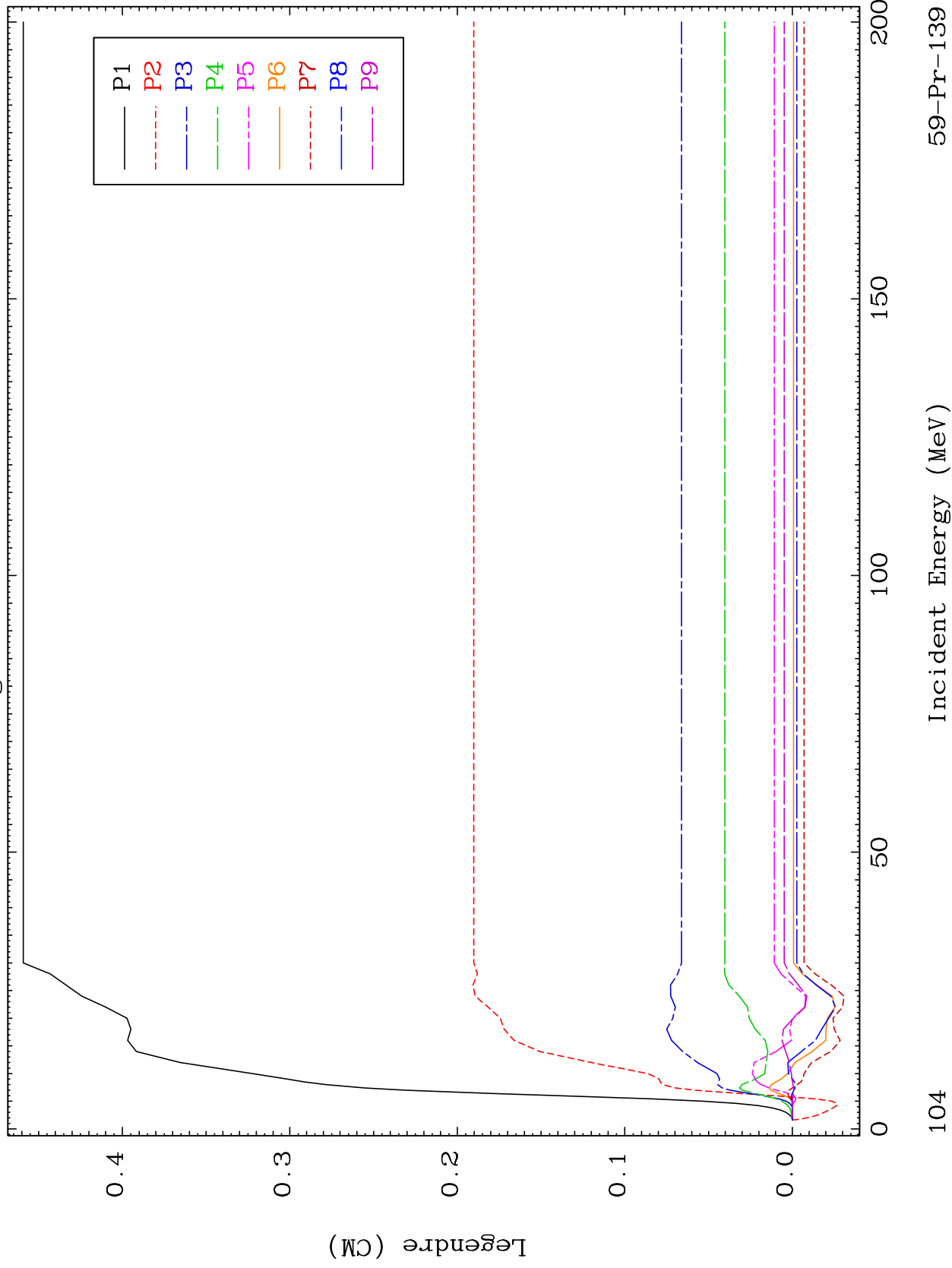
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 72 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

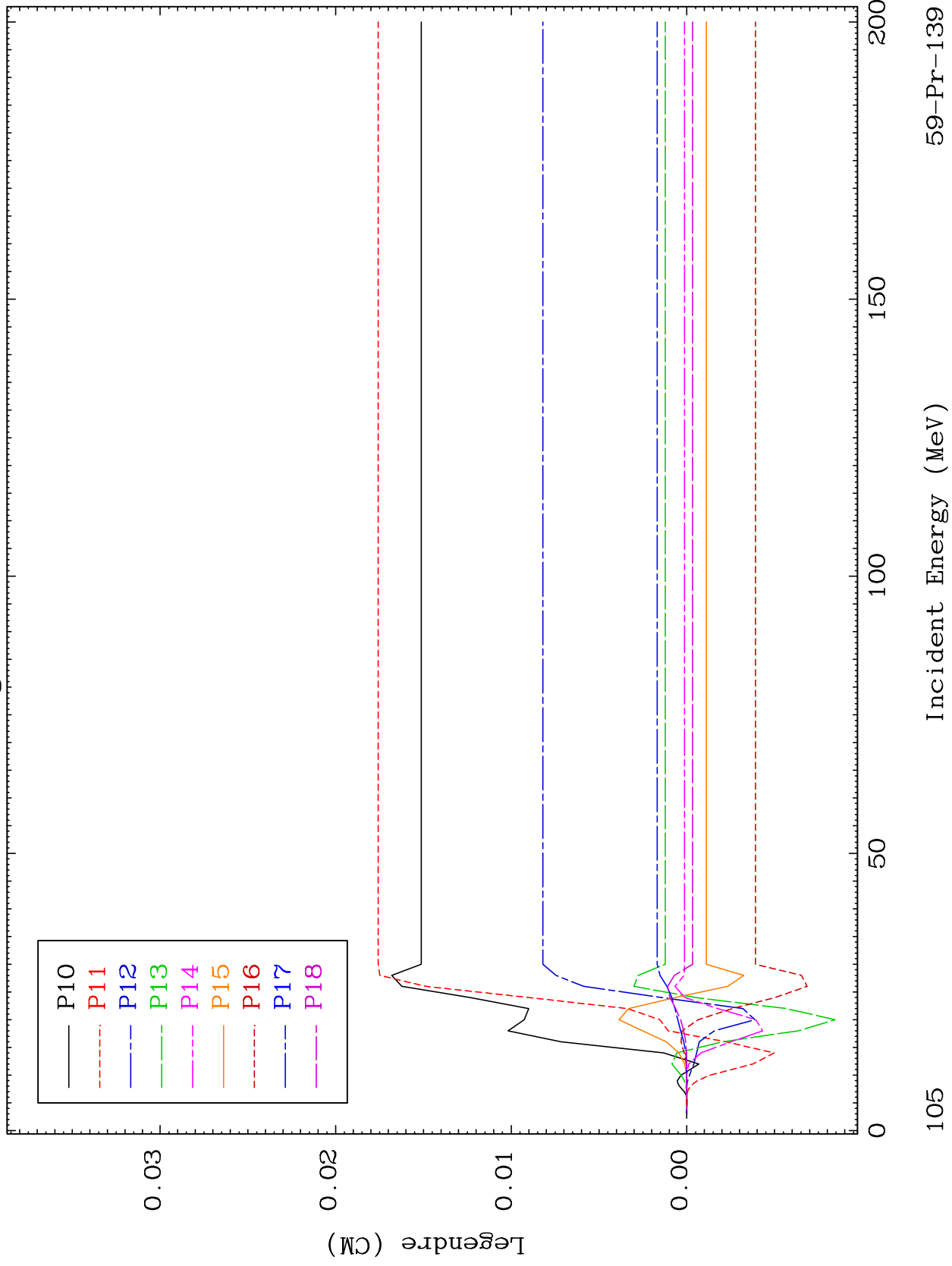
Incident Energy (MeV)

104

MAT 5919

MT= 72 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

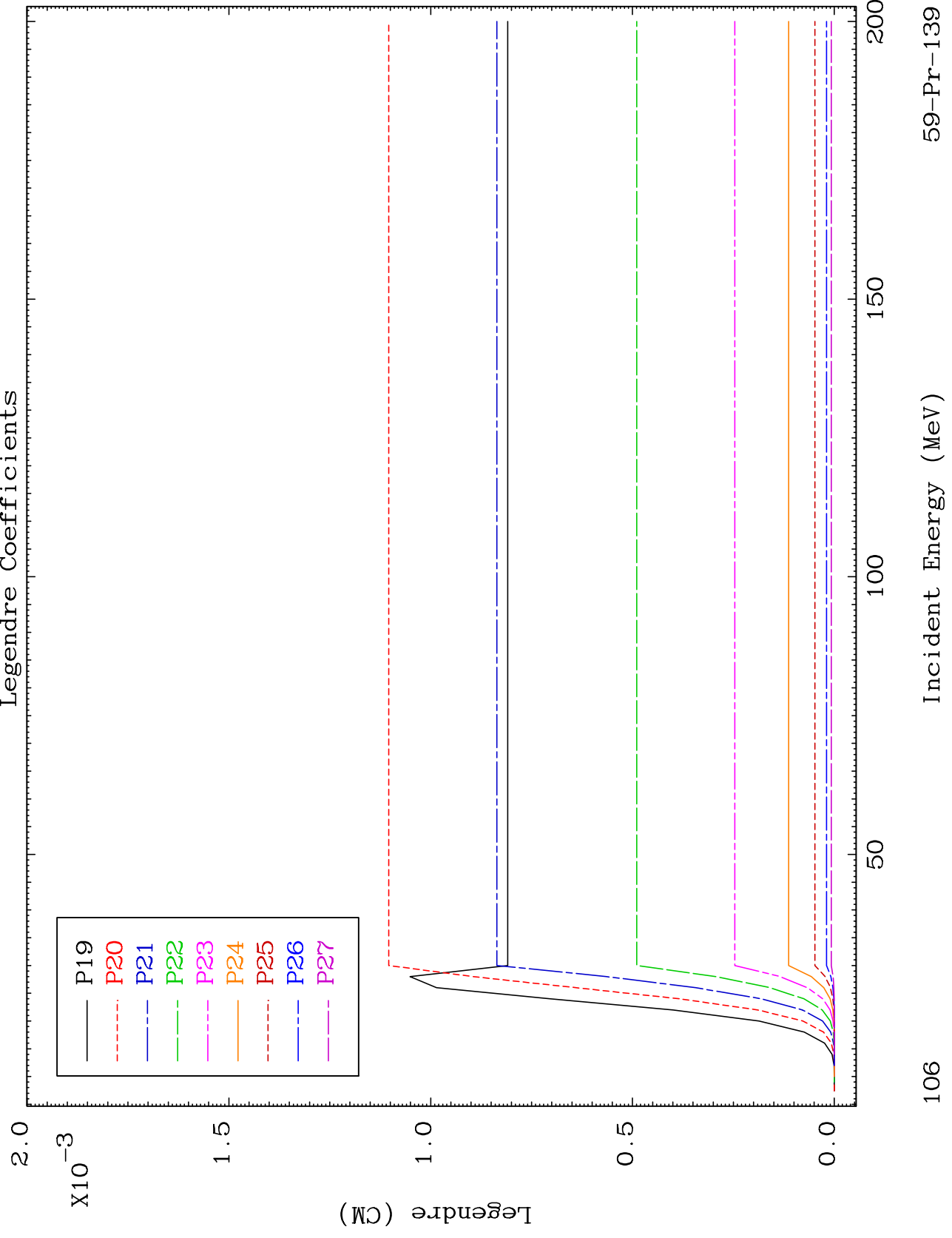
Incident Energy (MeV)

105

MAT 5919

MT= 72 (n,n') Level
Legendre Coefficients

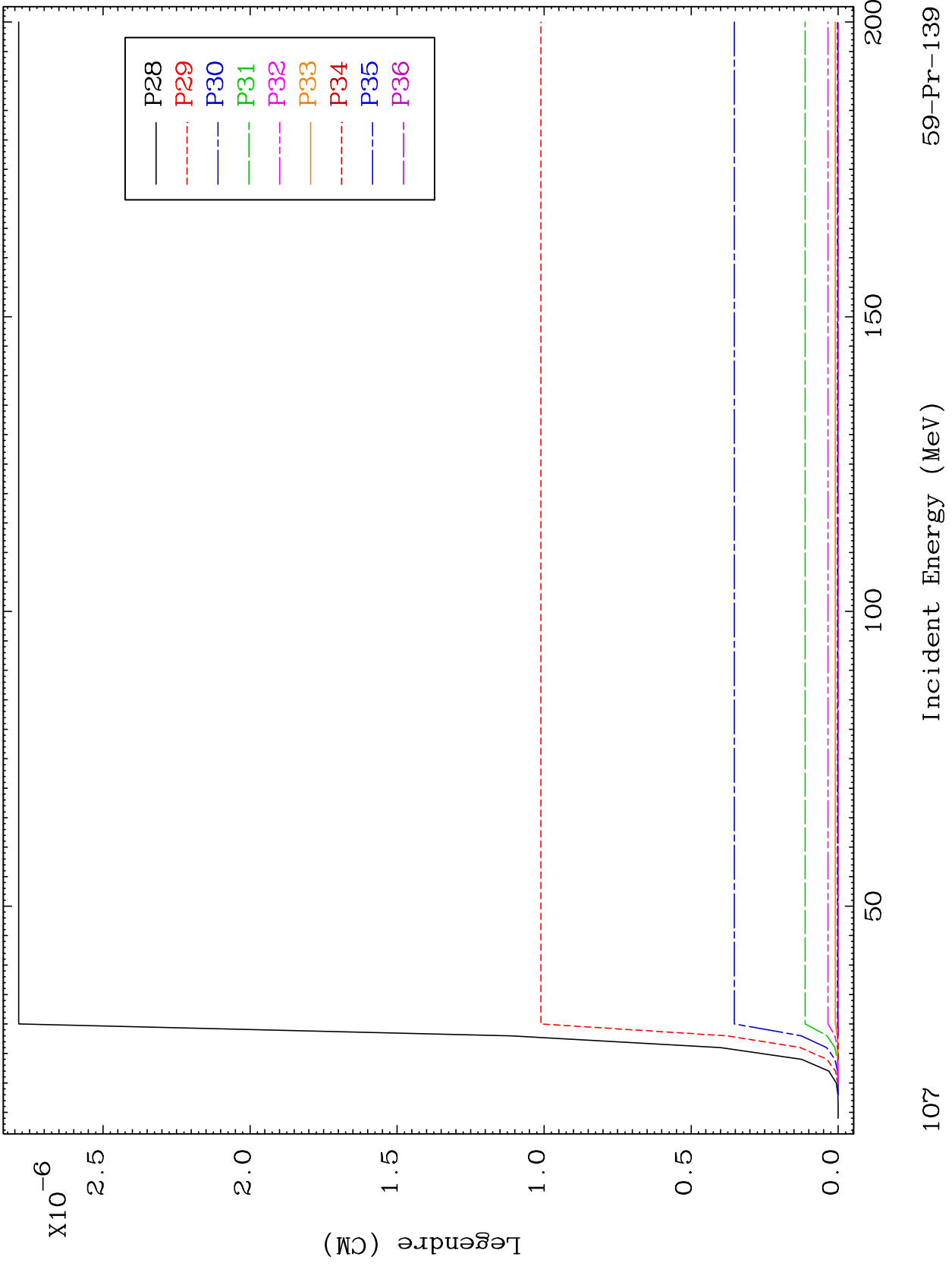
59-Pr-139



MAT 5919

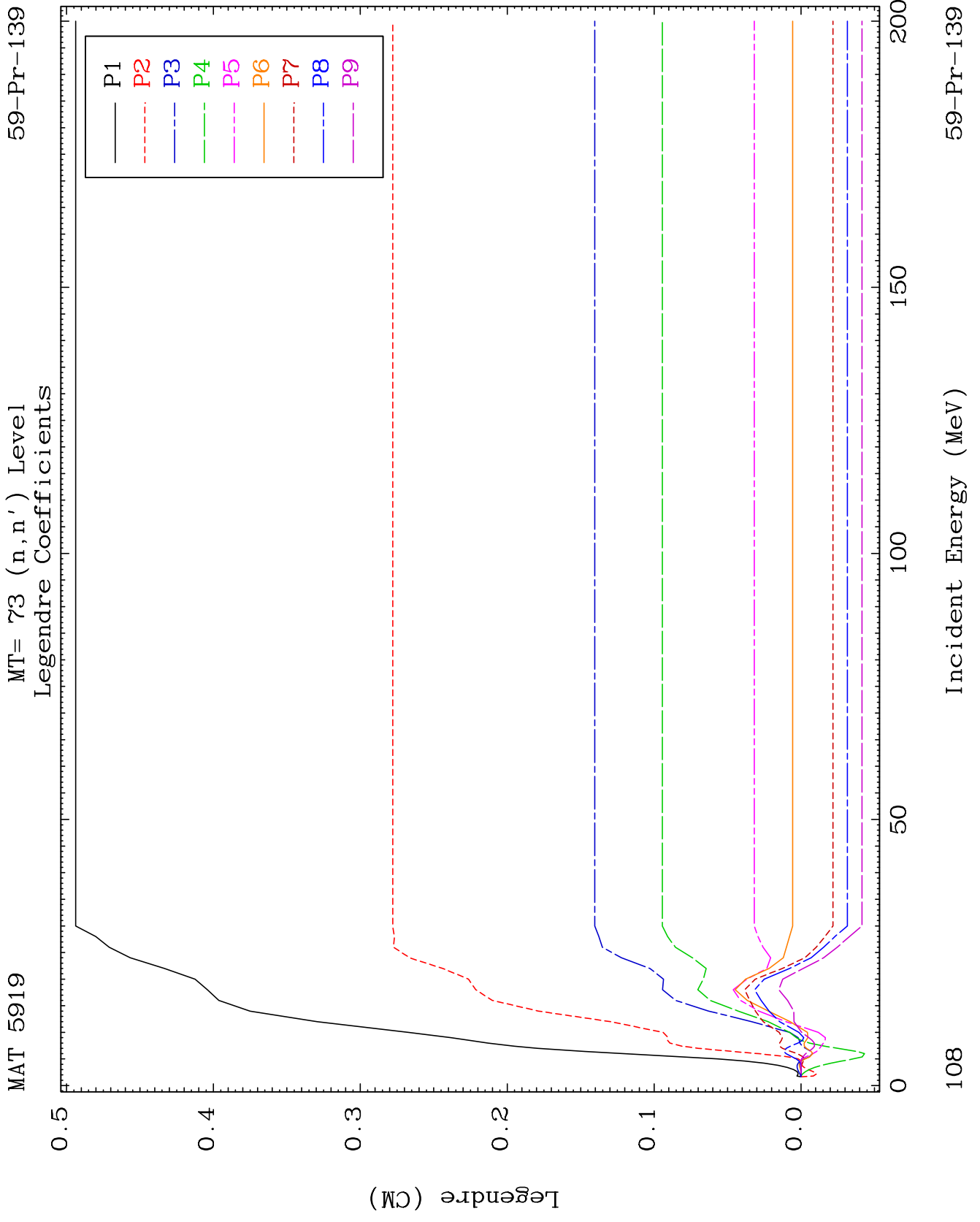
MT= 72 (n,n') Level
Legendre Coefficients

59-Pr-139



107

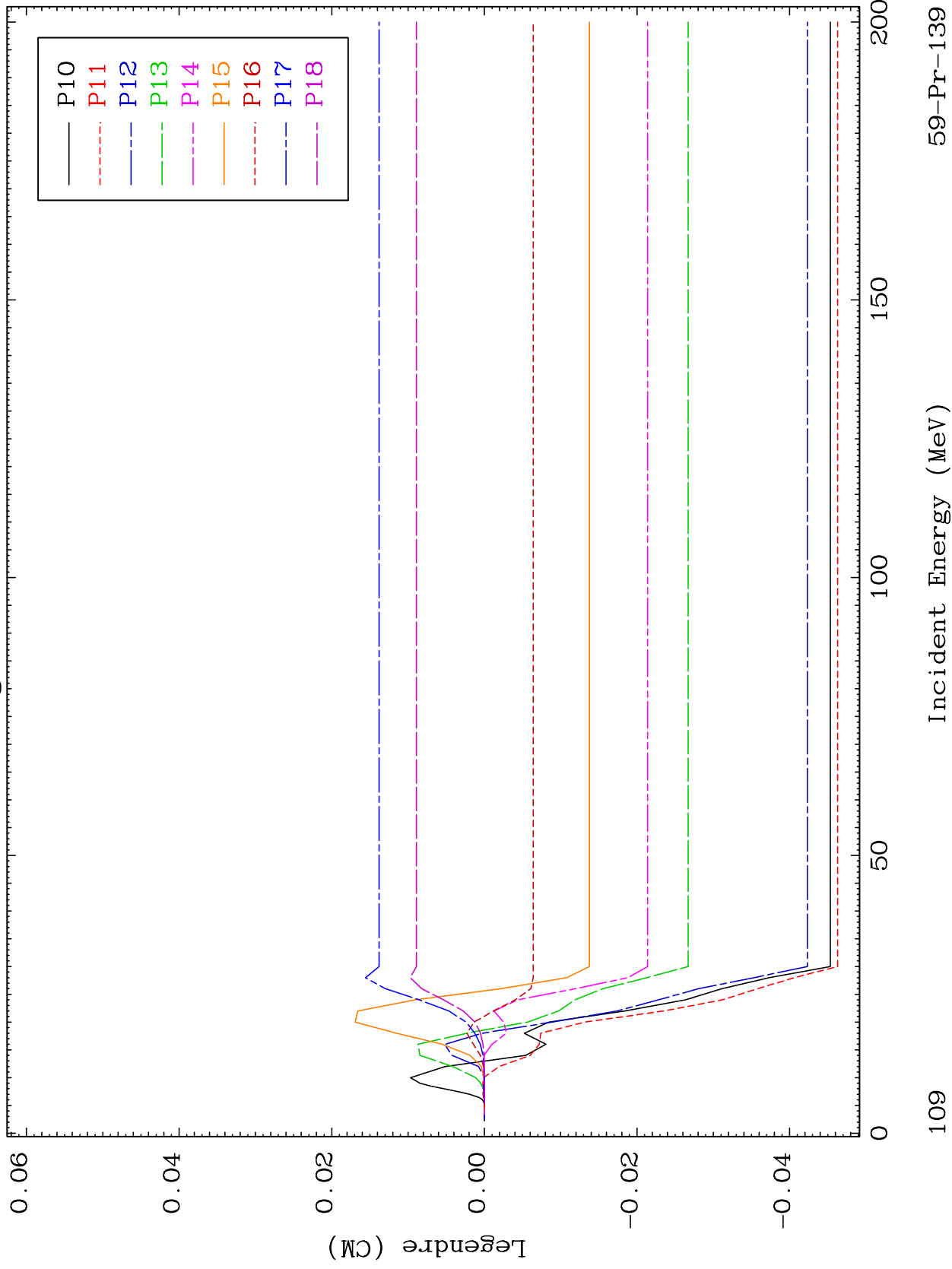
59-Pr-139



MAT 5919

MT= 73 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

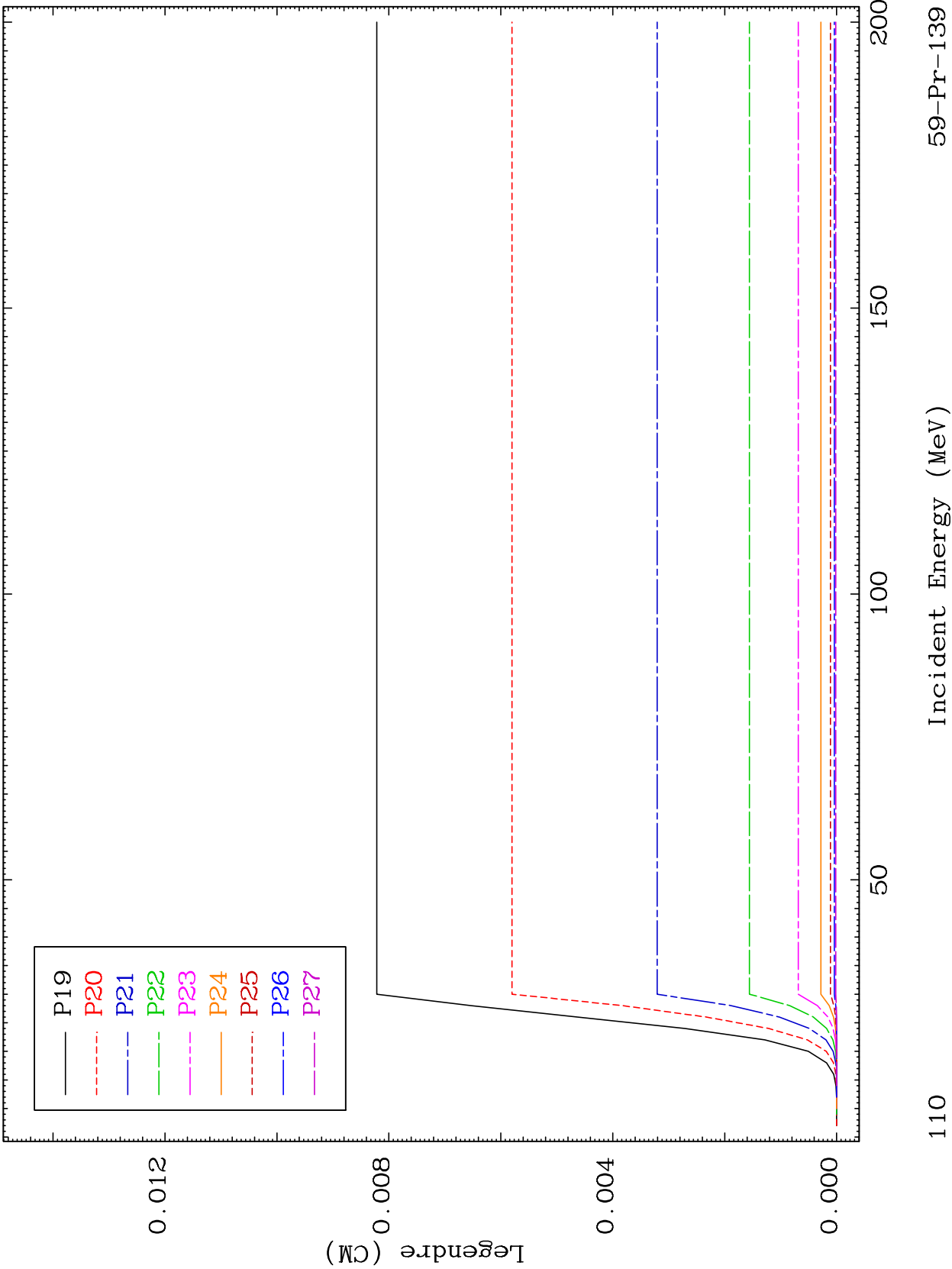
Incident Energy (MeV)

109

MAT 5919

MT= 73 (n,n') Level
Legendre Coefficients

59-Pr-139



110

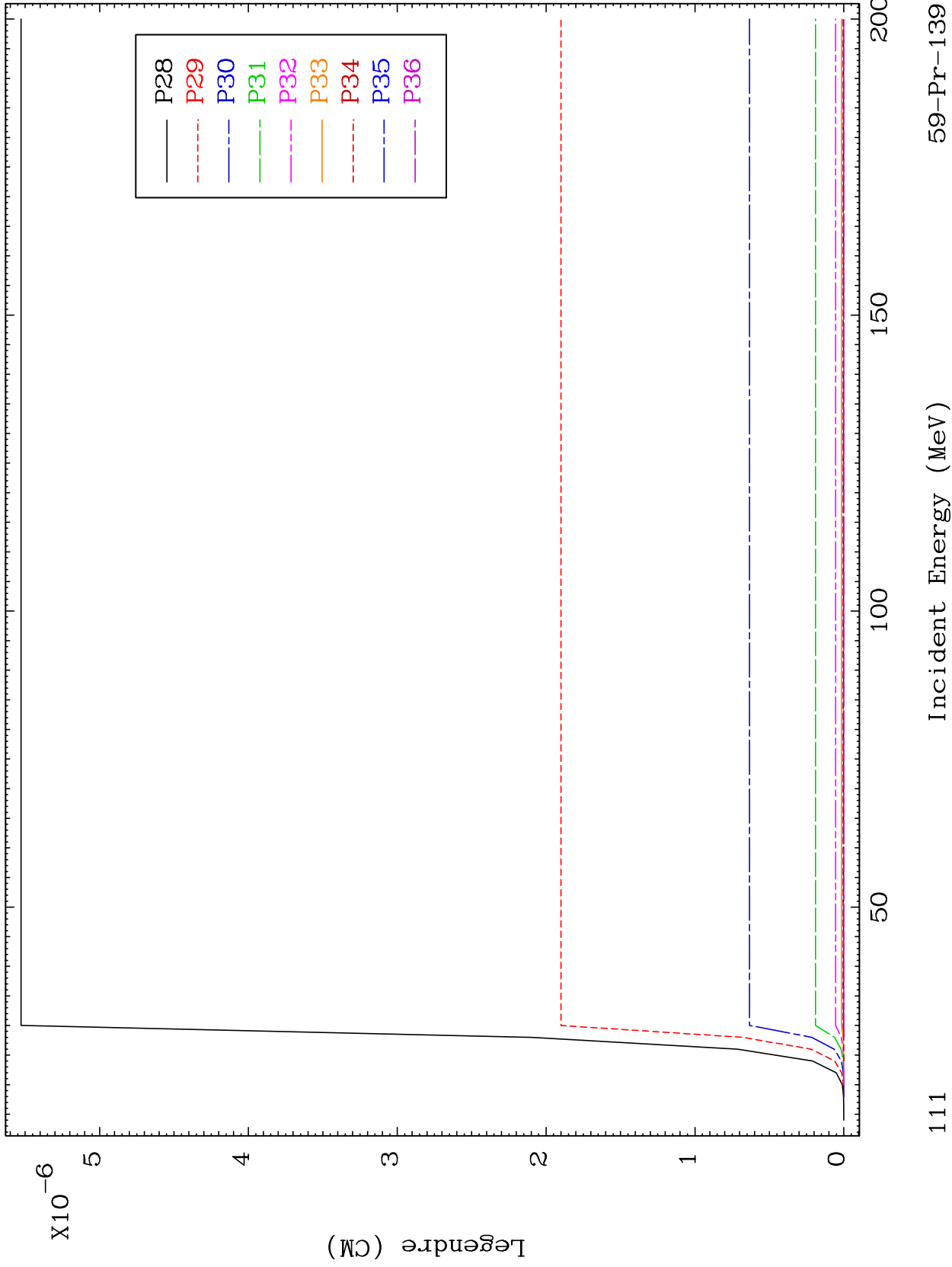
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 73 (n,n') Level
Legendre Coefficients

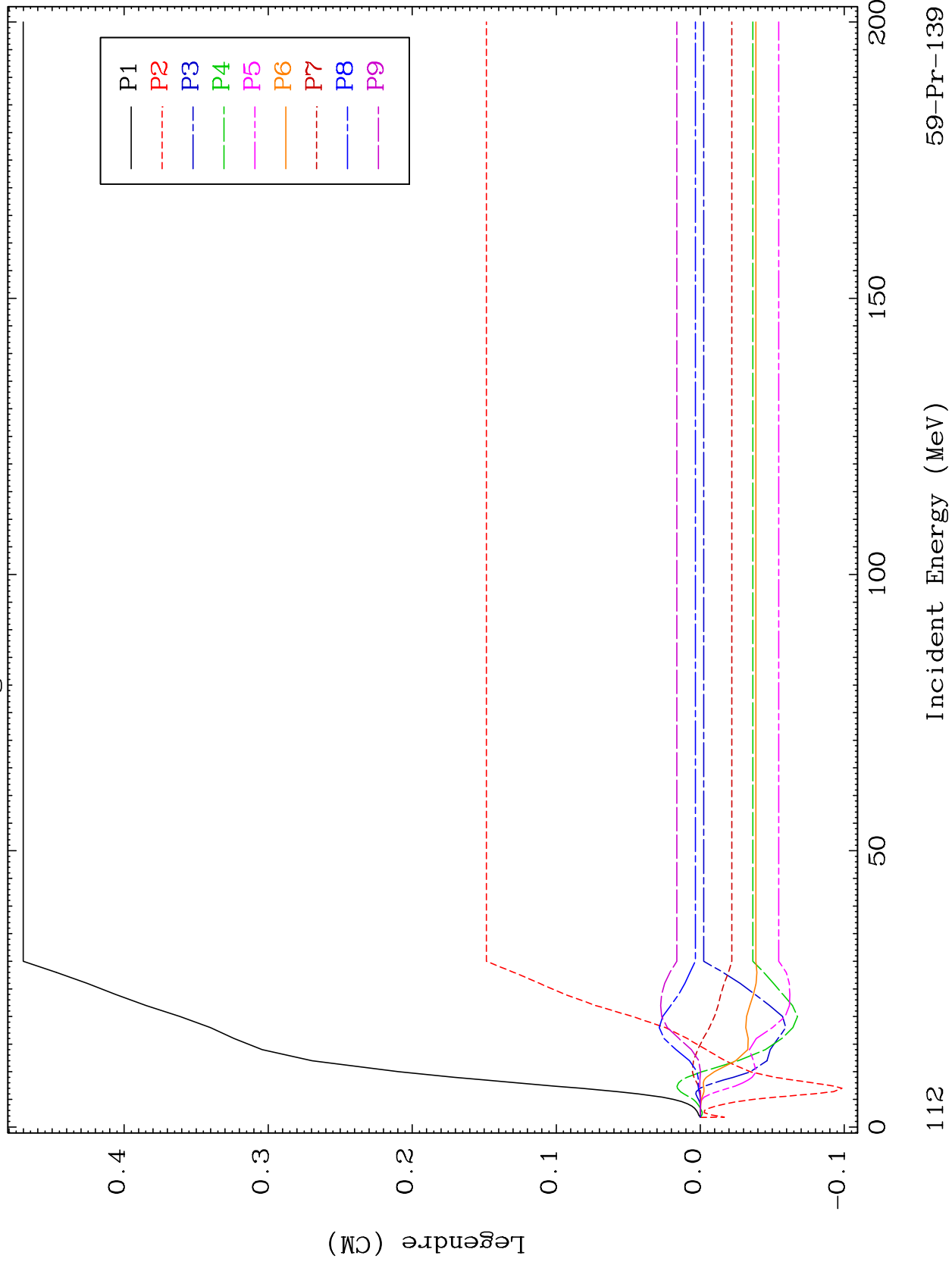
59-Pr-139



MAT 5919

MT= 74 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

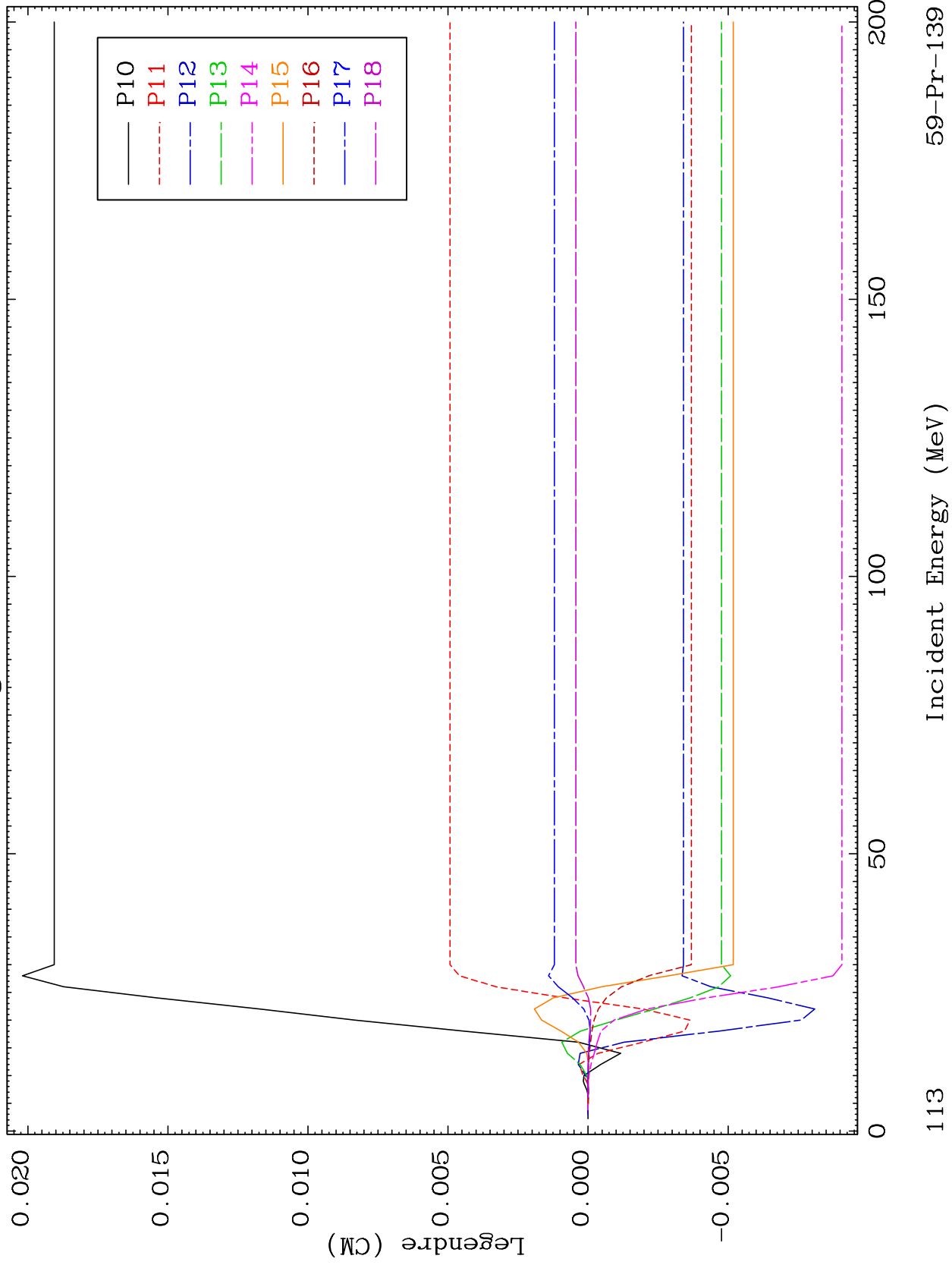
Incident Energy (MeV)

112

MAT 5919

MT= 74 (n,n') Level
Legendre Coefficients

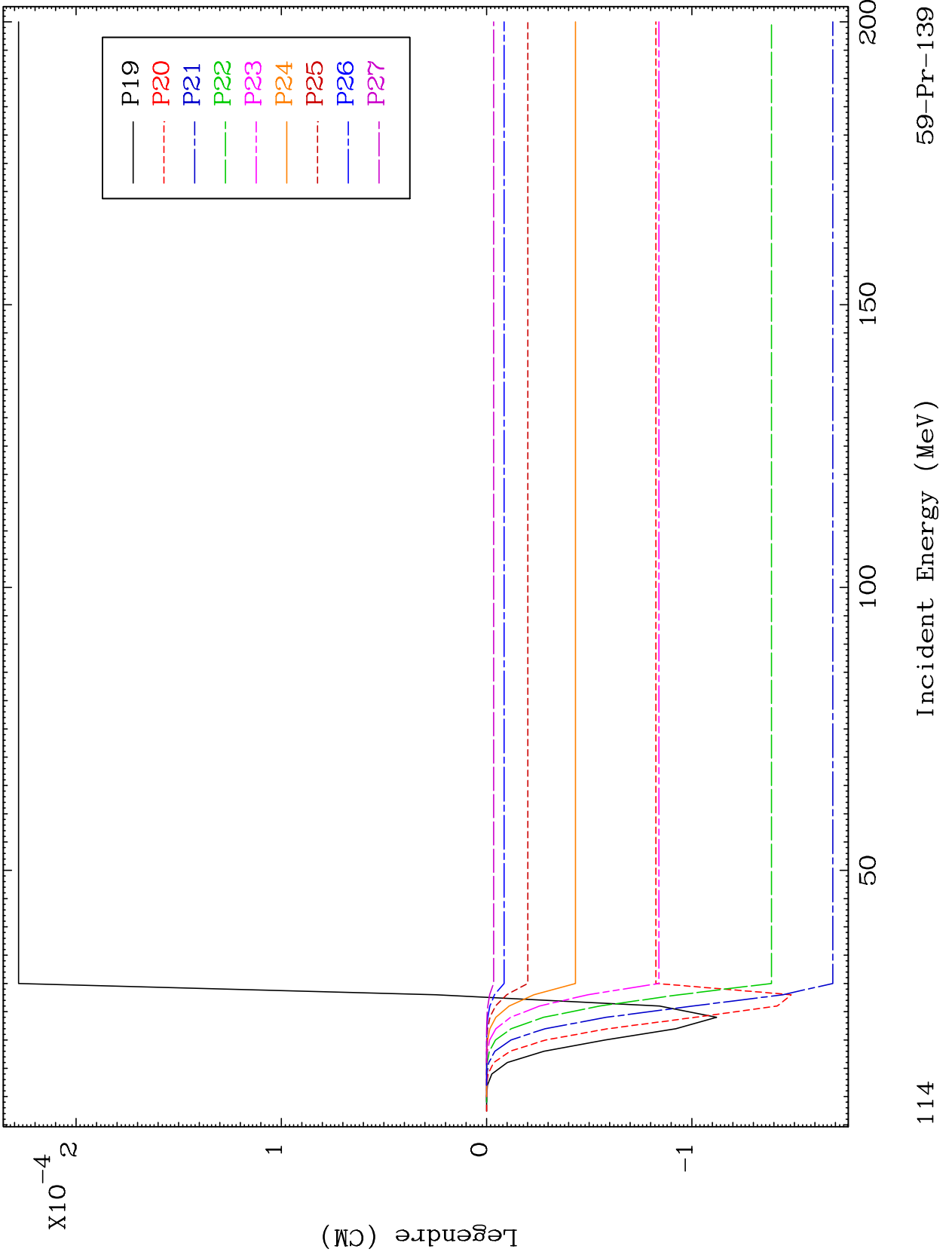
59-Pr-139



113

Incident Energy (MeV)

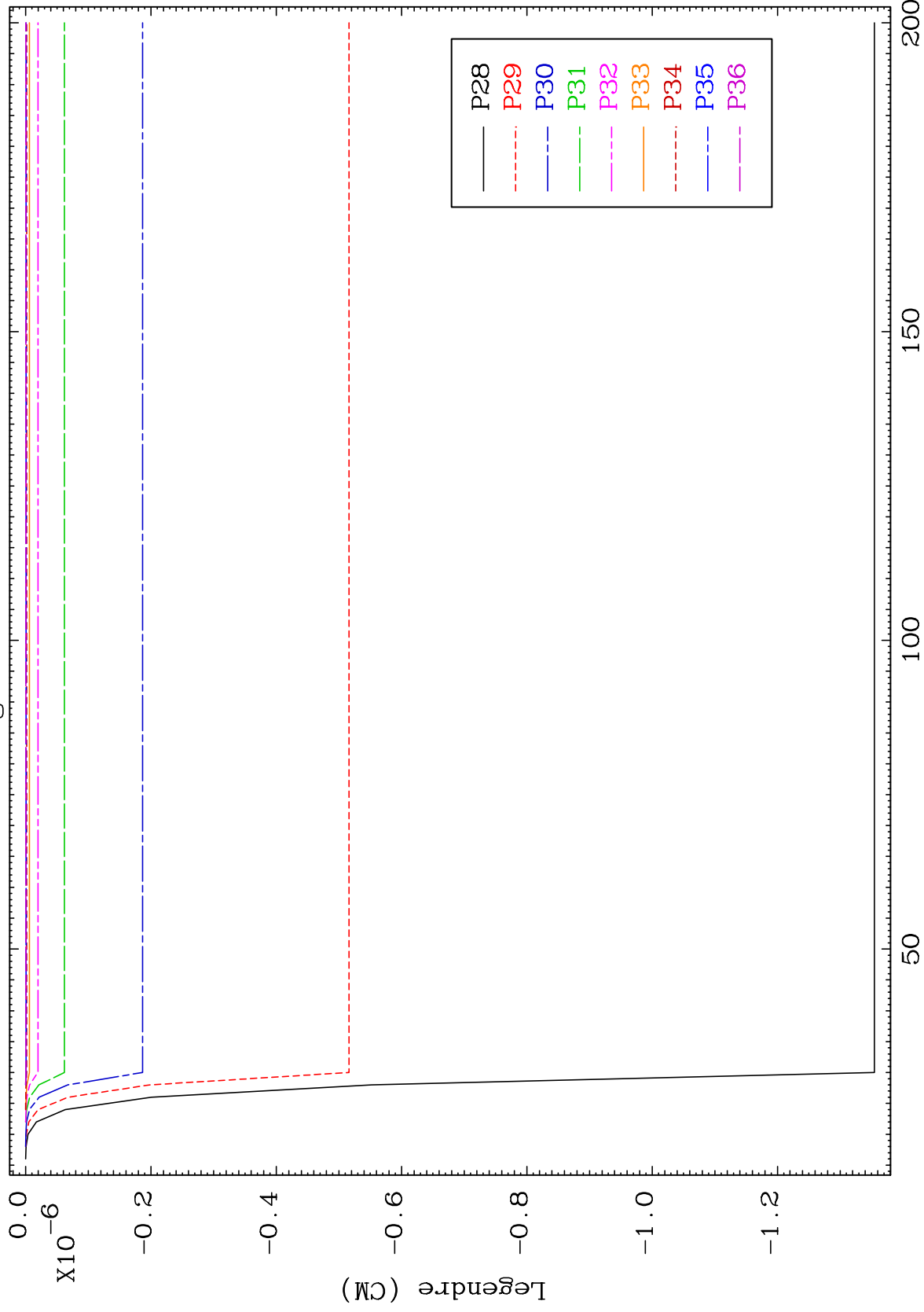
59-Pr-139



MAT 5919

MT= 74 (n,n') Level
Legendre Coefficients

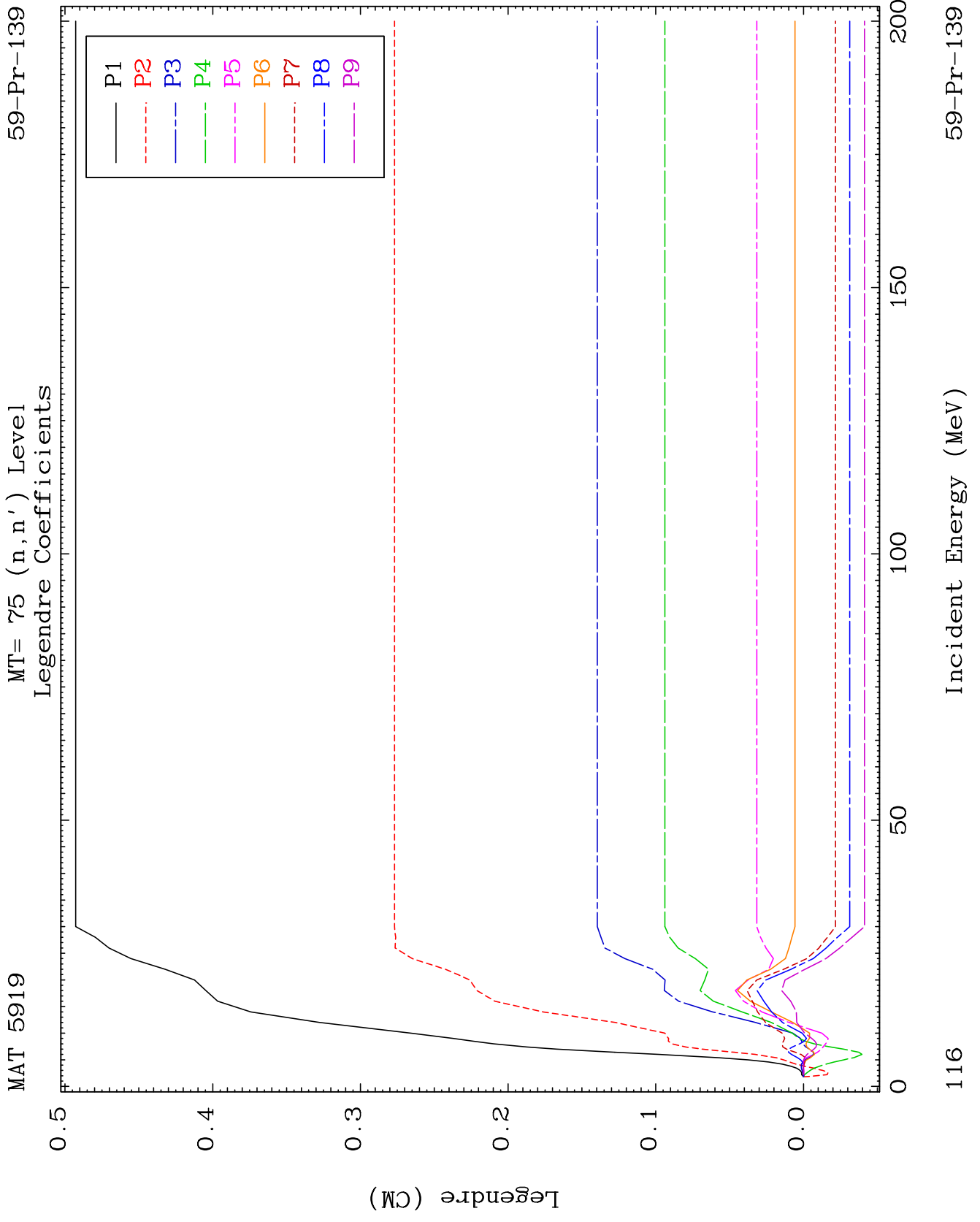
59-Pr-139



115

Incident Energy (MeV)

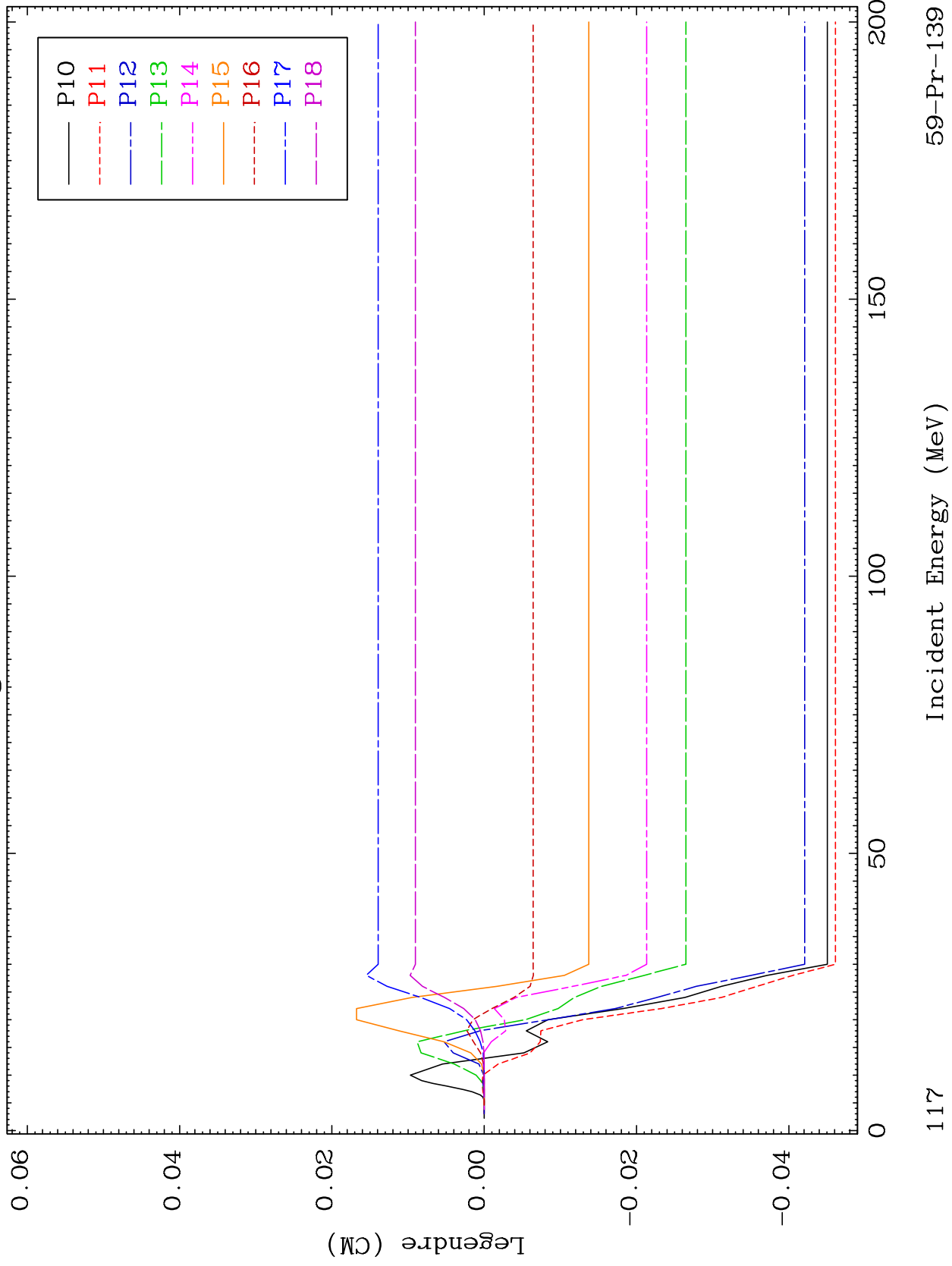
59-Pr-139



MAT 5919

MT= 75 (n,n') Level
Legendre Coefficients

59-Pr-139



117

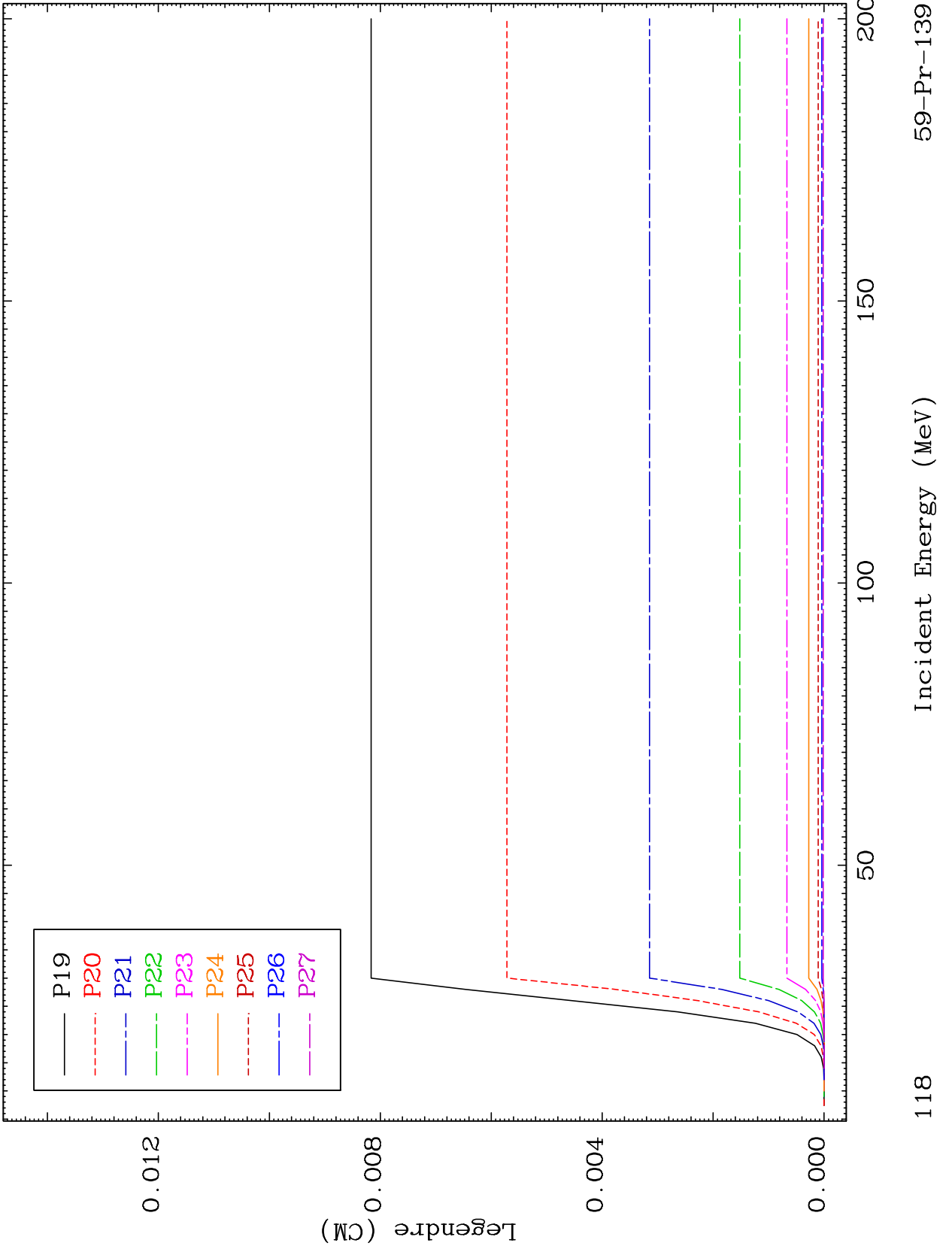
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 75 (n,n') Level
Legendre Coefficients

59-Pr-139



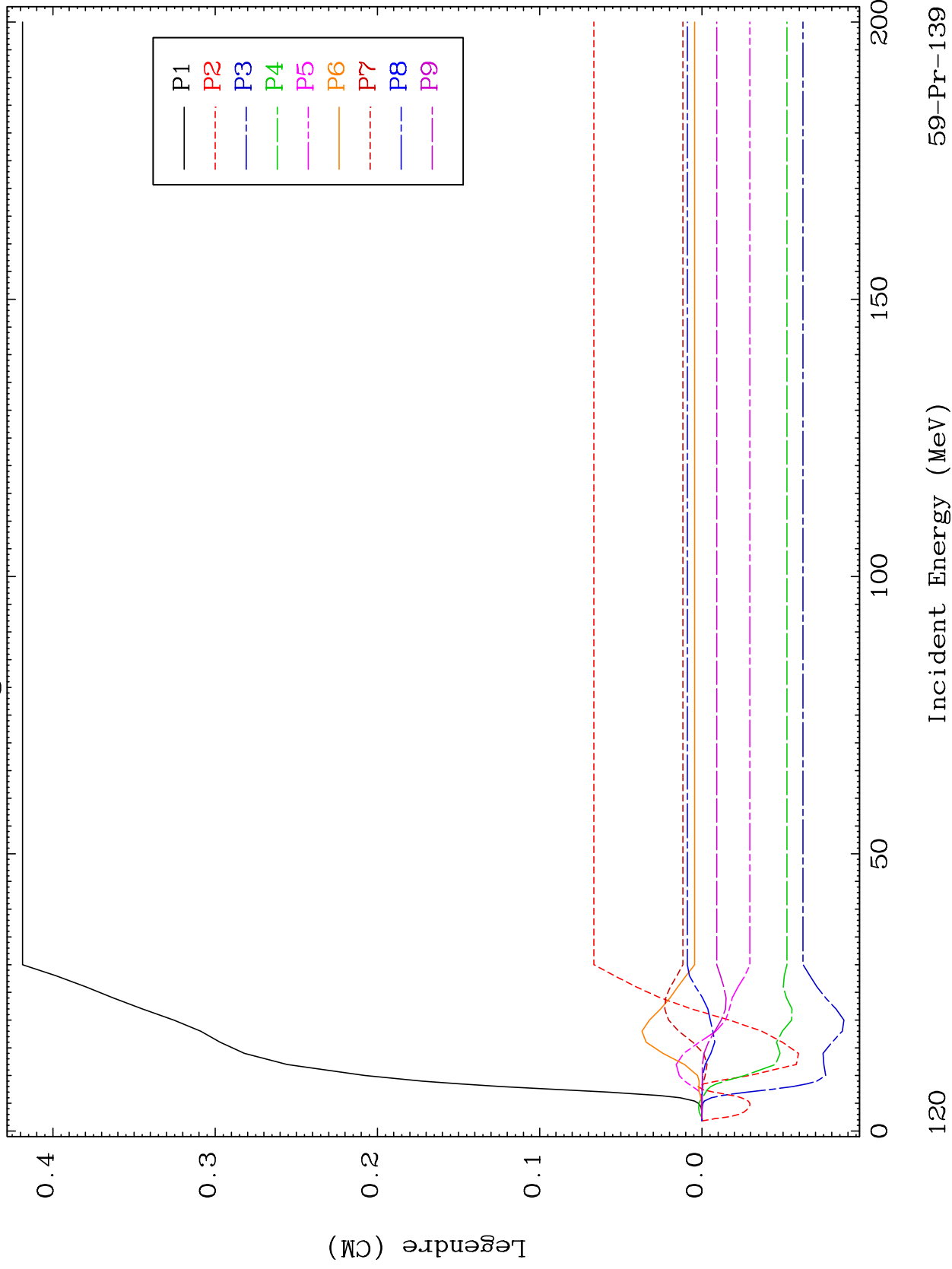
118

59-Pr-139

MAT 5919

MT= 76 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

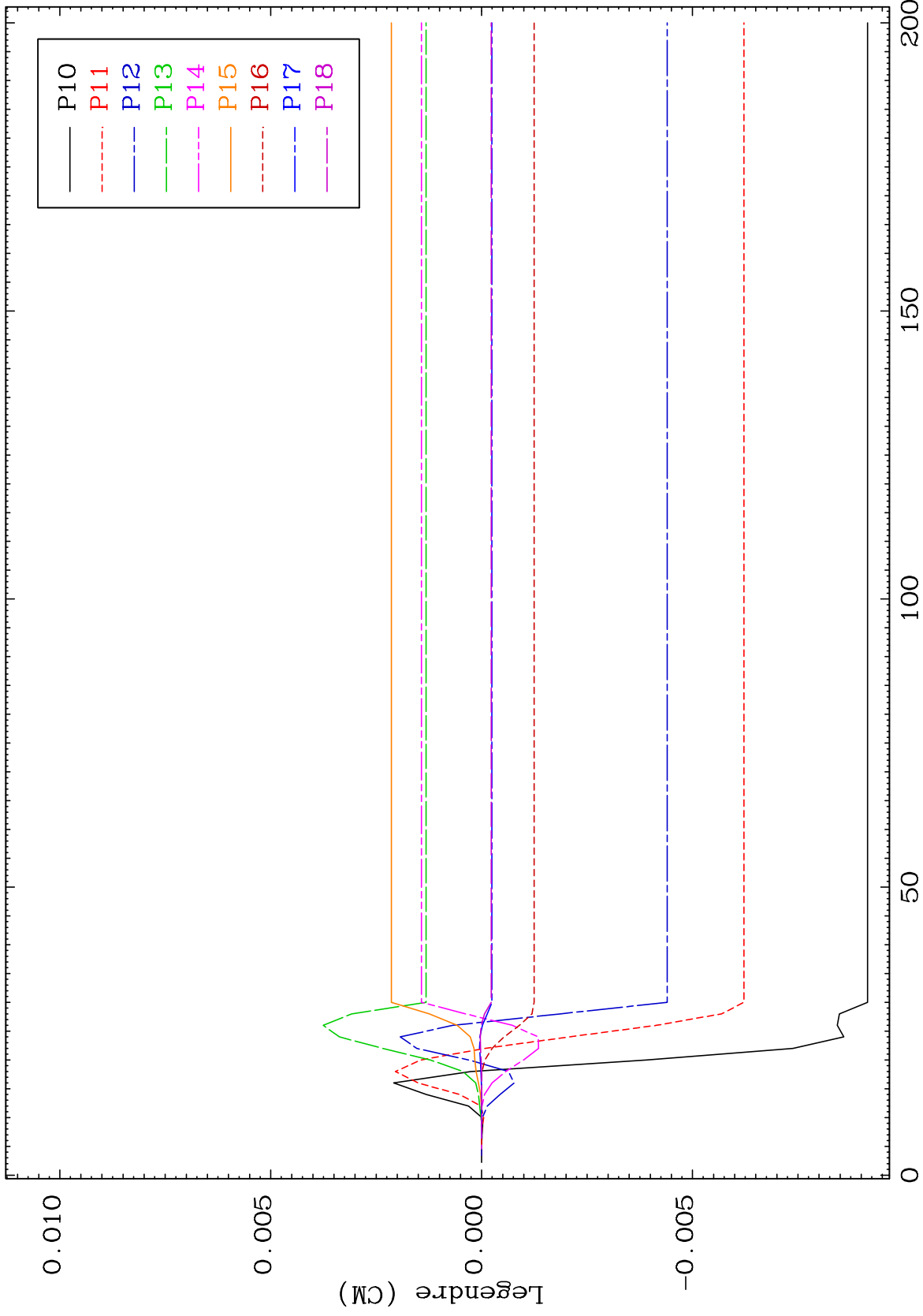
Incident Energy (MeV)

120

MAT 5919

MT= 76 (n,n') Level
Legendre Coefficients

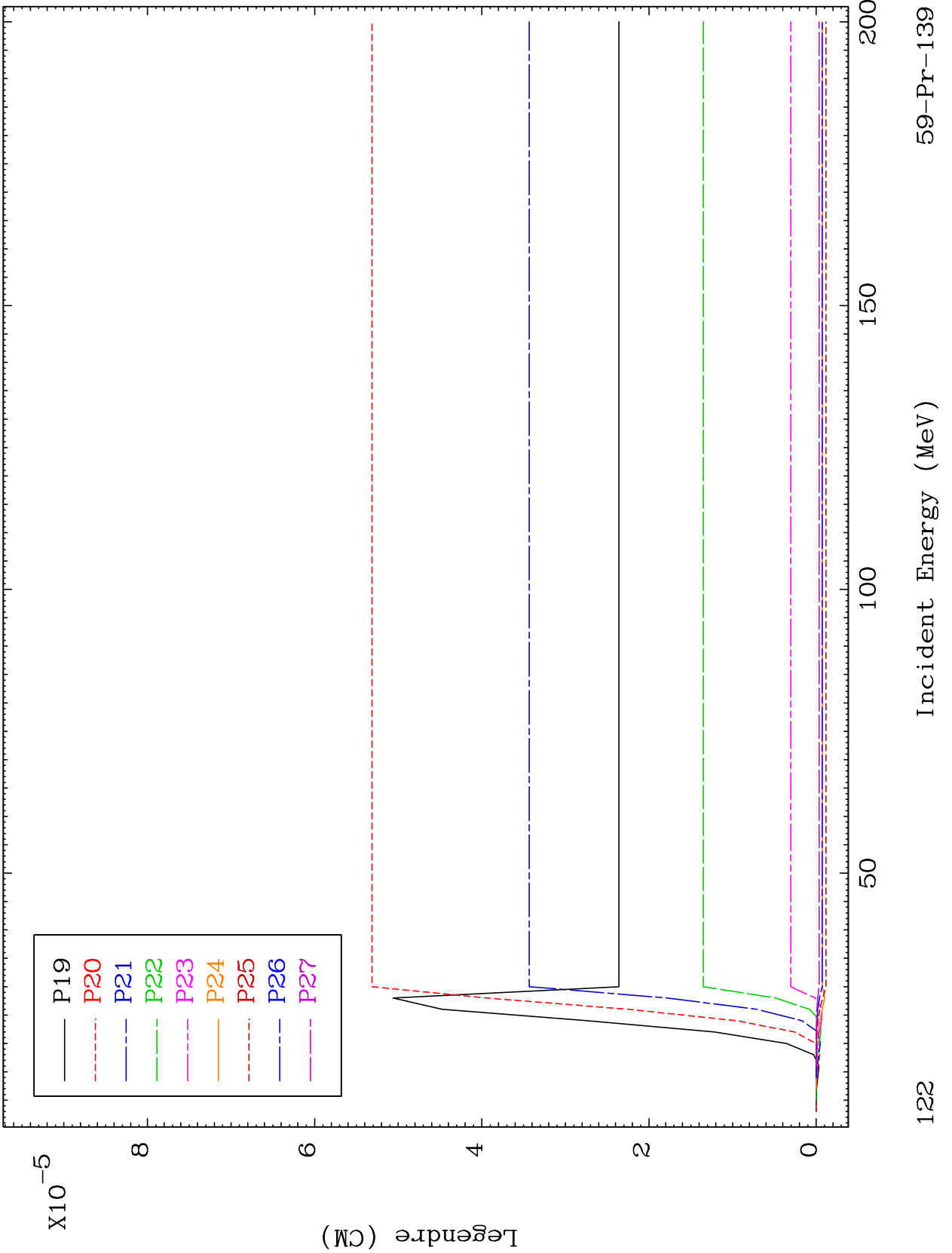
59-Pr-139



121

Incident Energy (MeV)

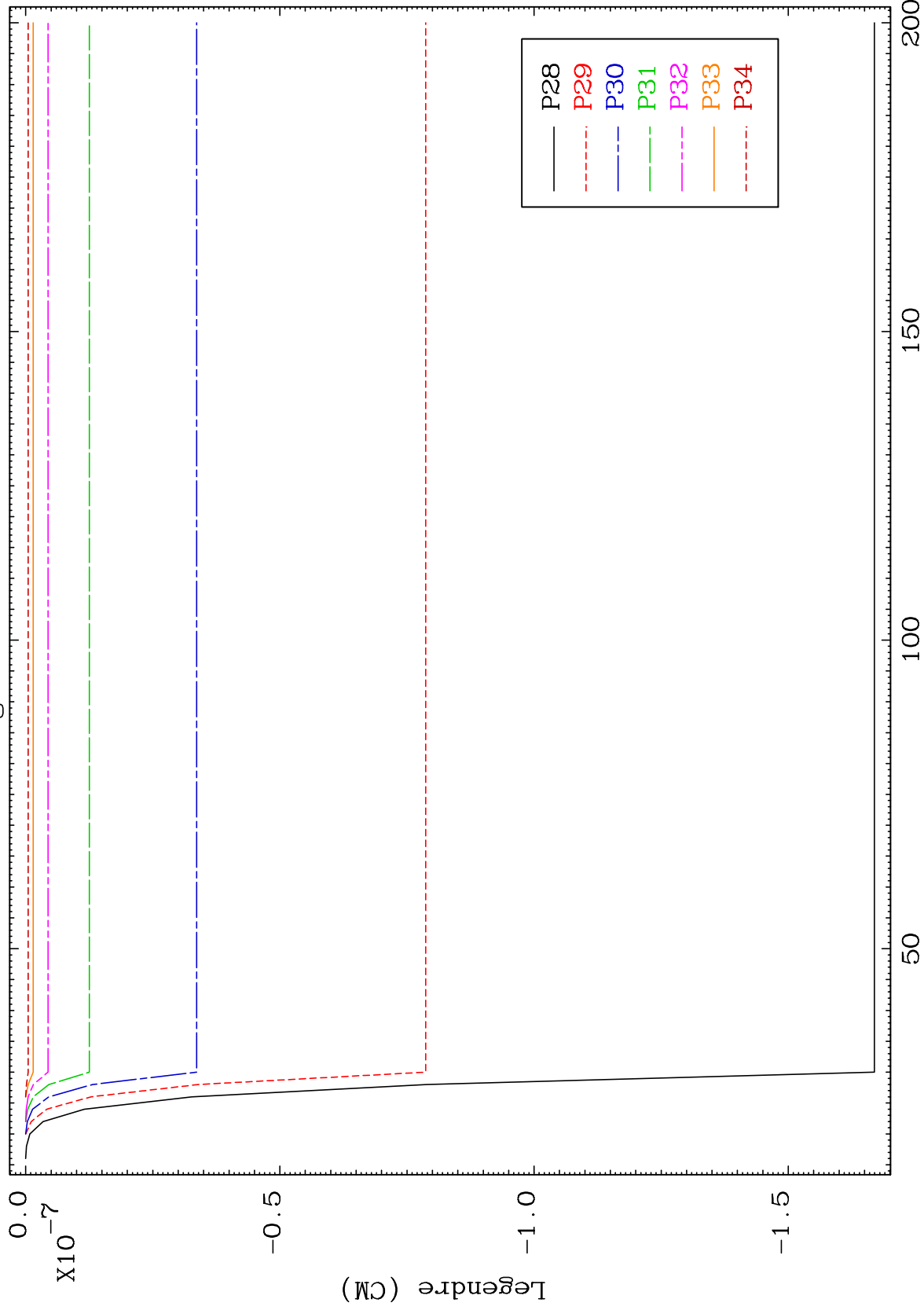
59-Pr-139



MAT 5919

MT= 76 (n,n') Level
Legendre Coefficients

59-Pr-139



123

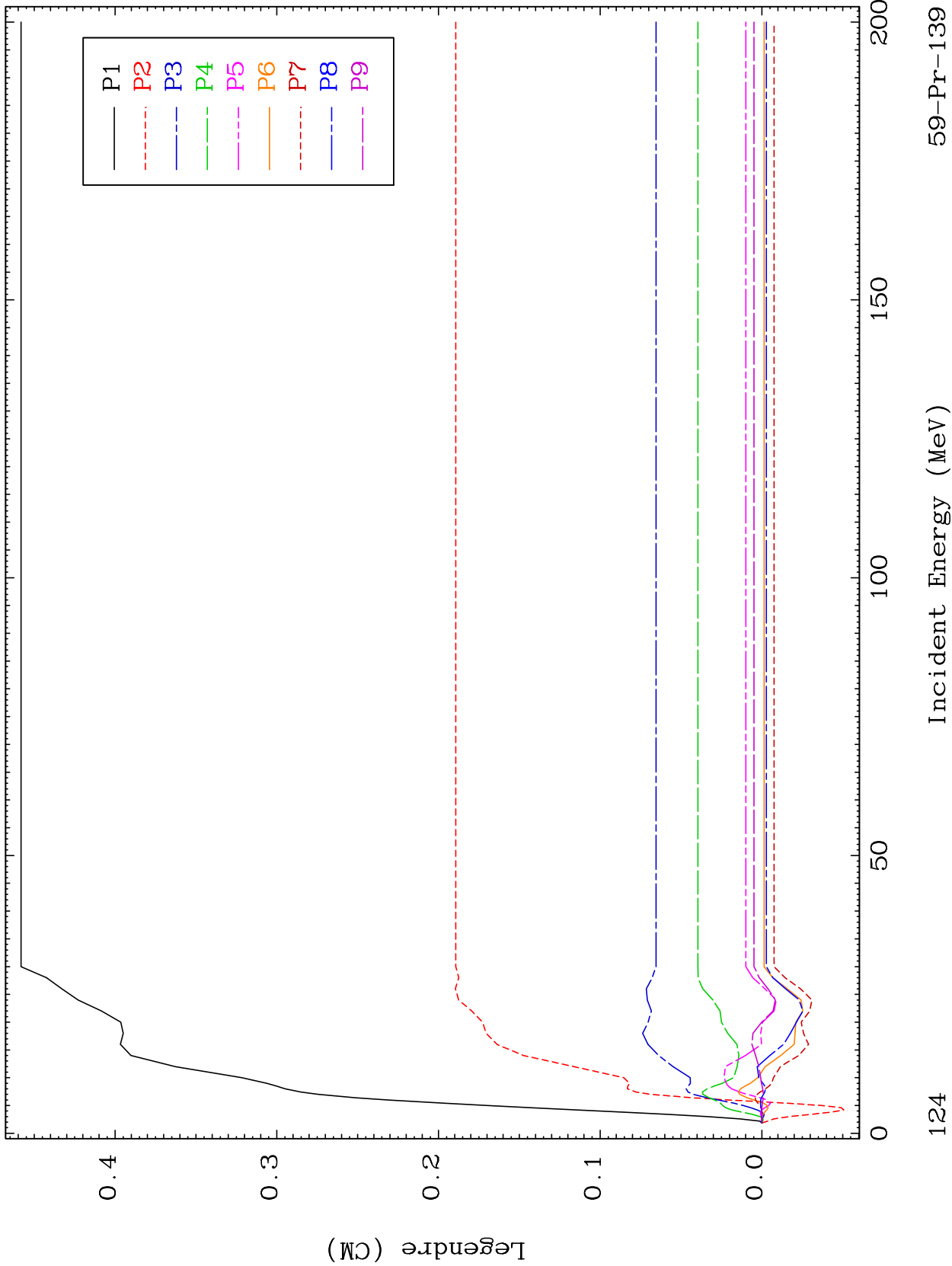
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 77 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

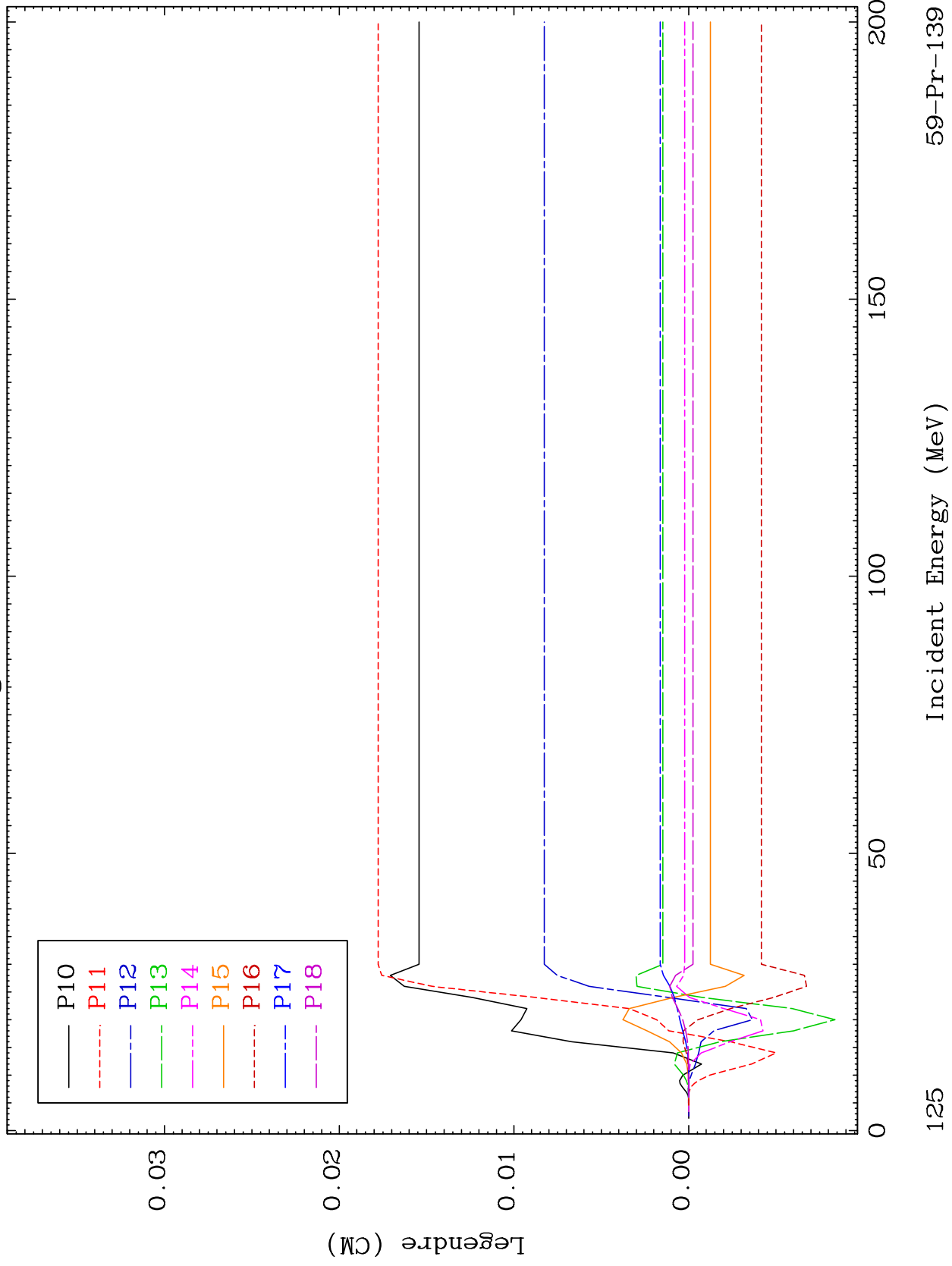
Incident Energy (MeV)

124

MAT 5919

MT= 77 (n,n') Level
Legendre Coefficients

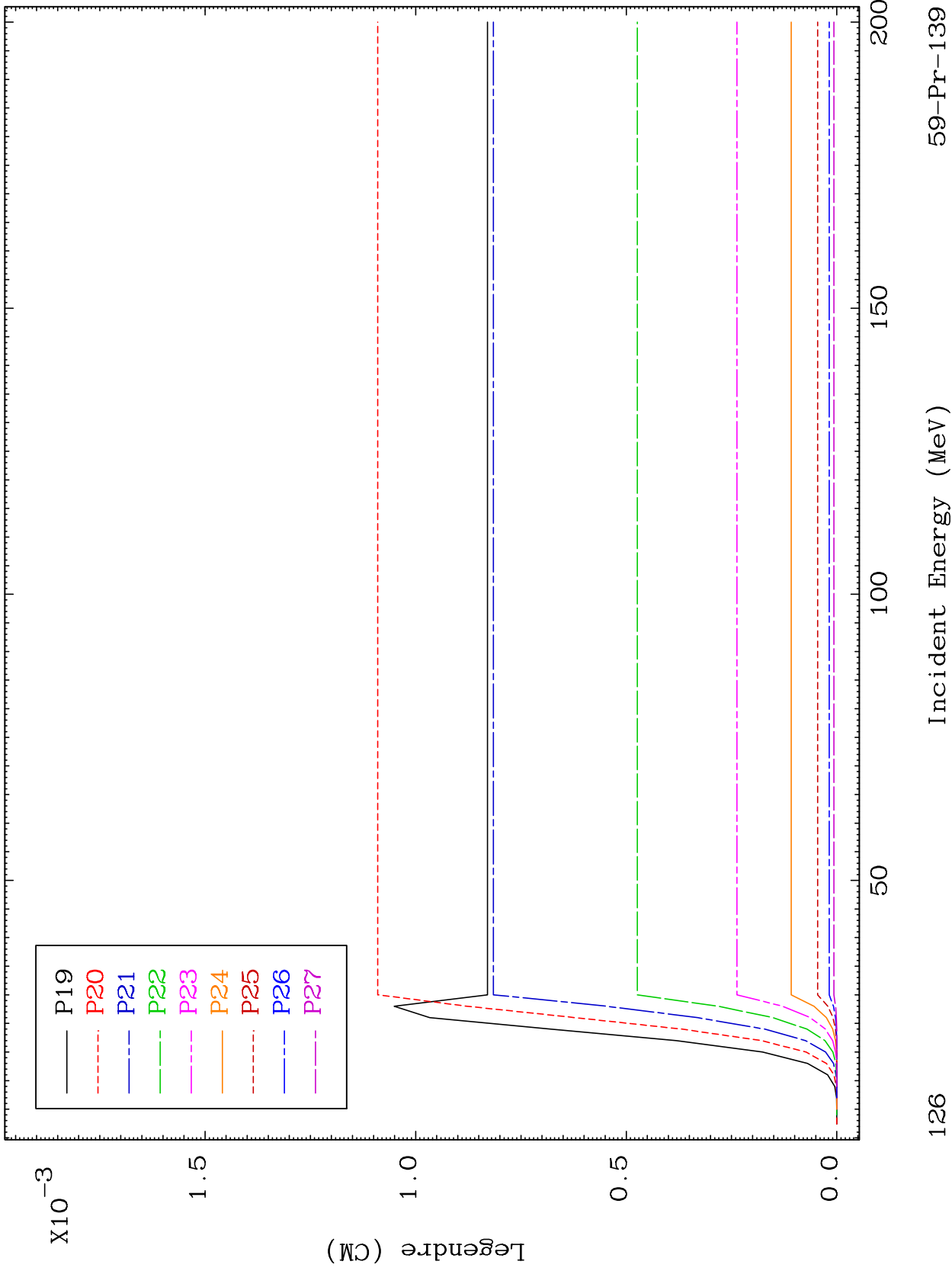
59-Pr-139

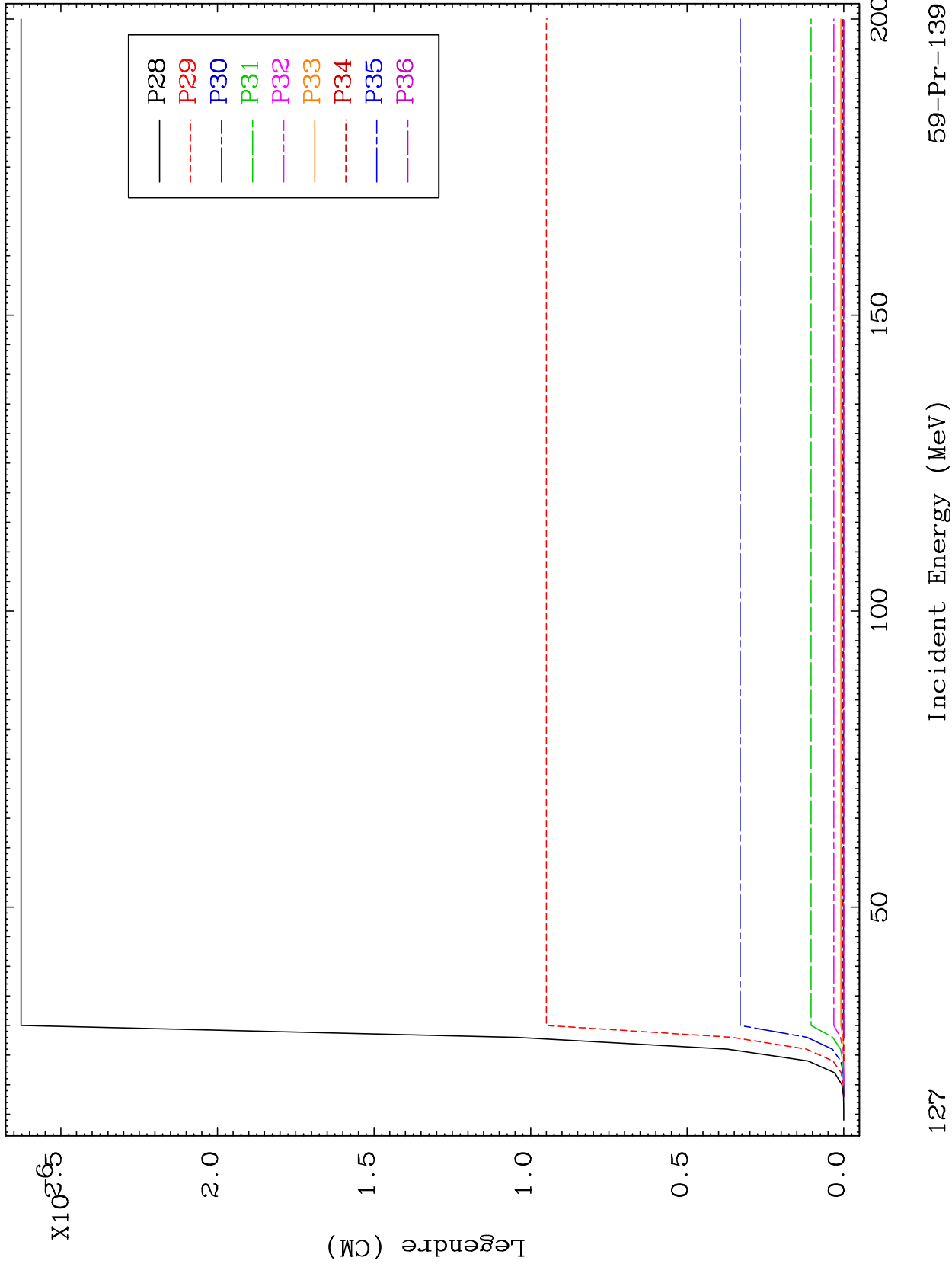


59-Pr-139

Incident Energy (MeV)

125

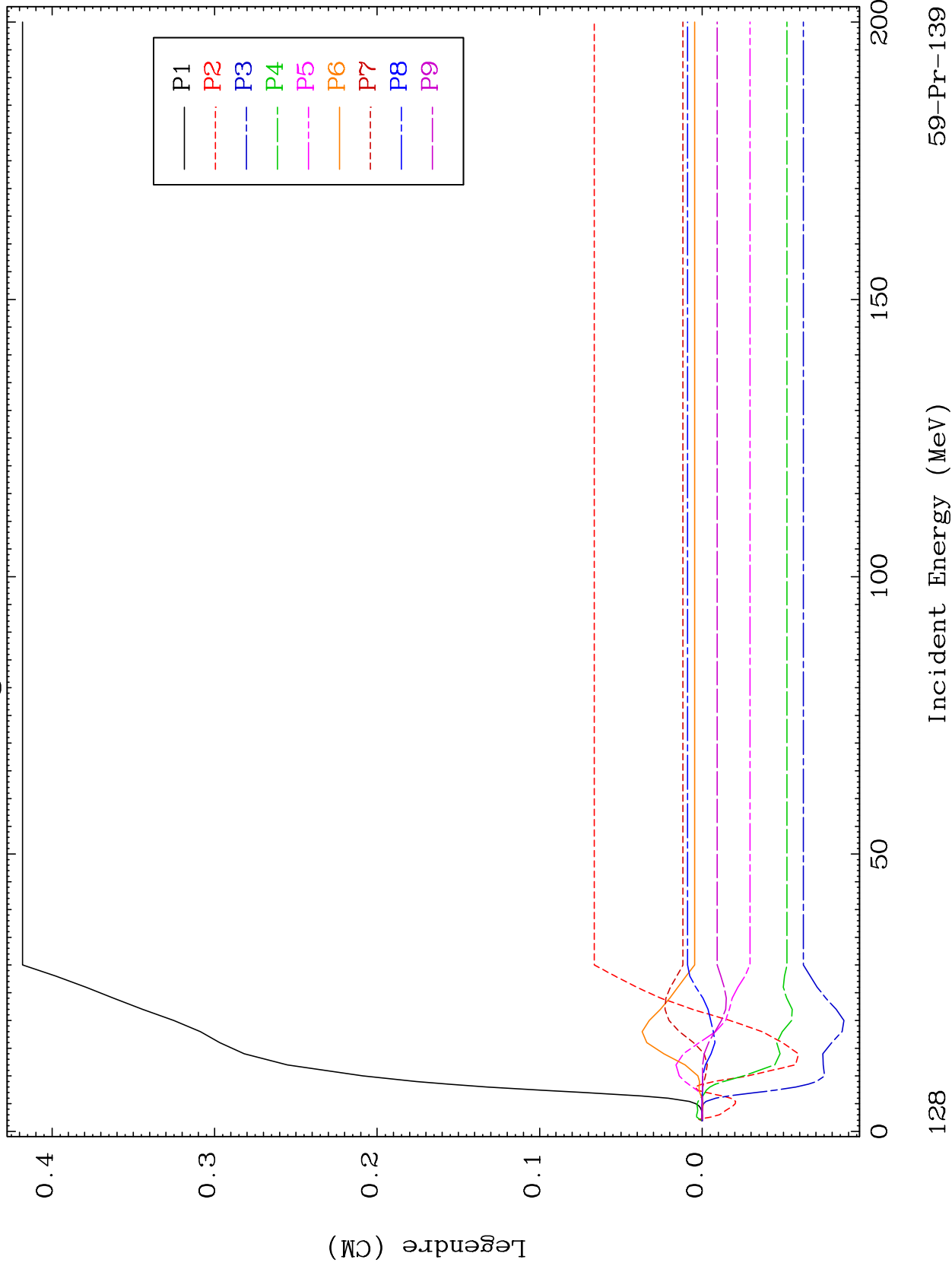




MAT 5919

MT= 78 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

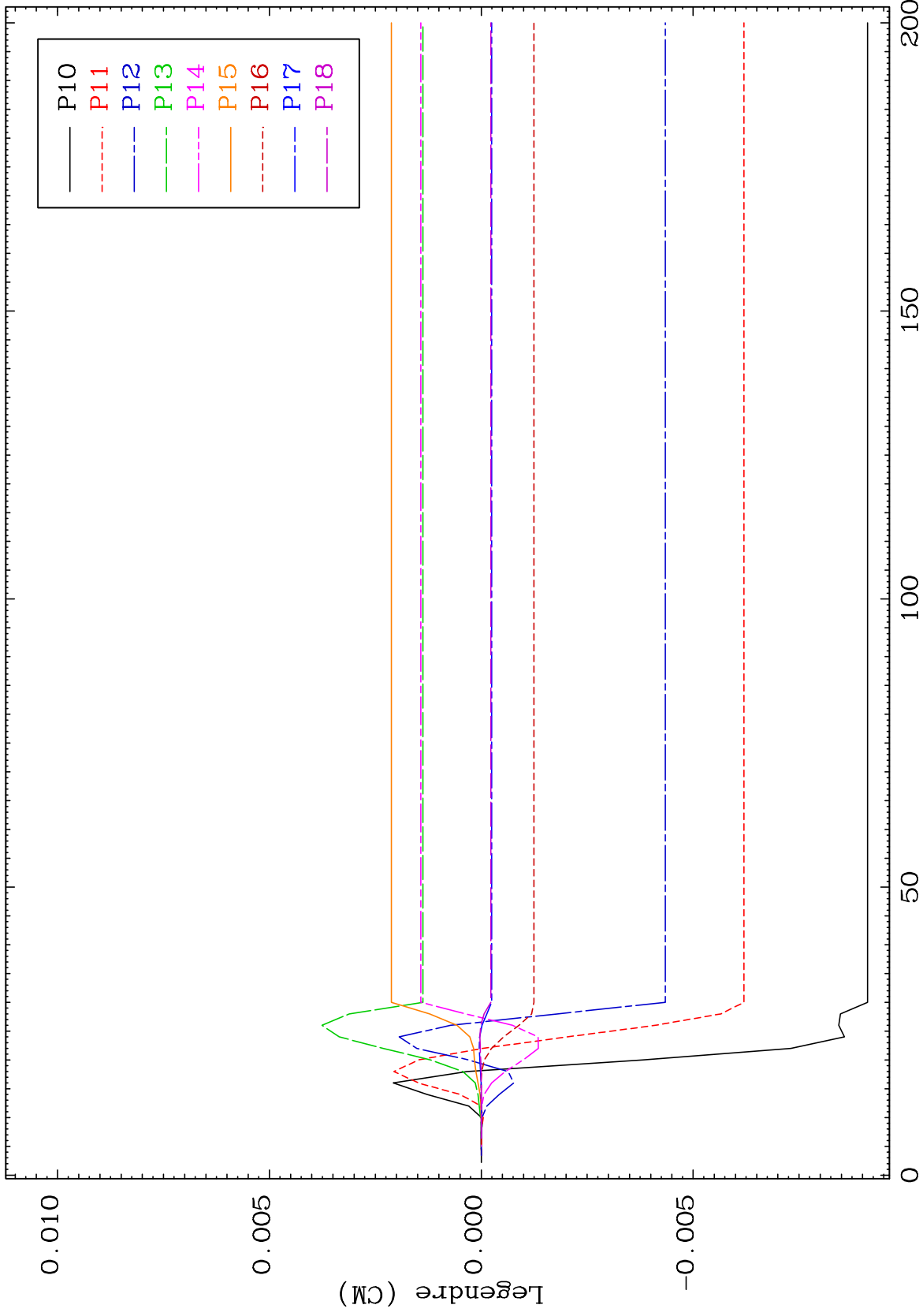
Incident Energy (MeV)

128

MAT 5919

MT= 78 (n,n') Level
Legendre Coefficients

59-Pr-139



129

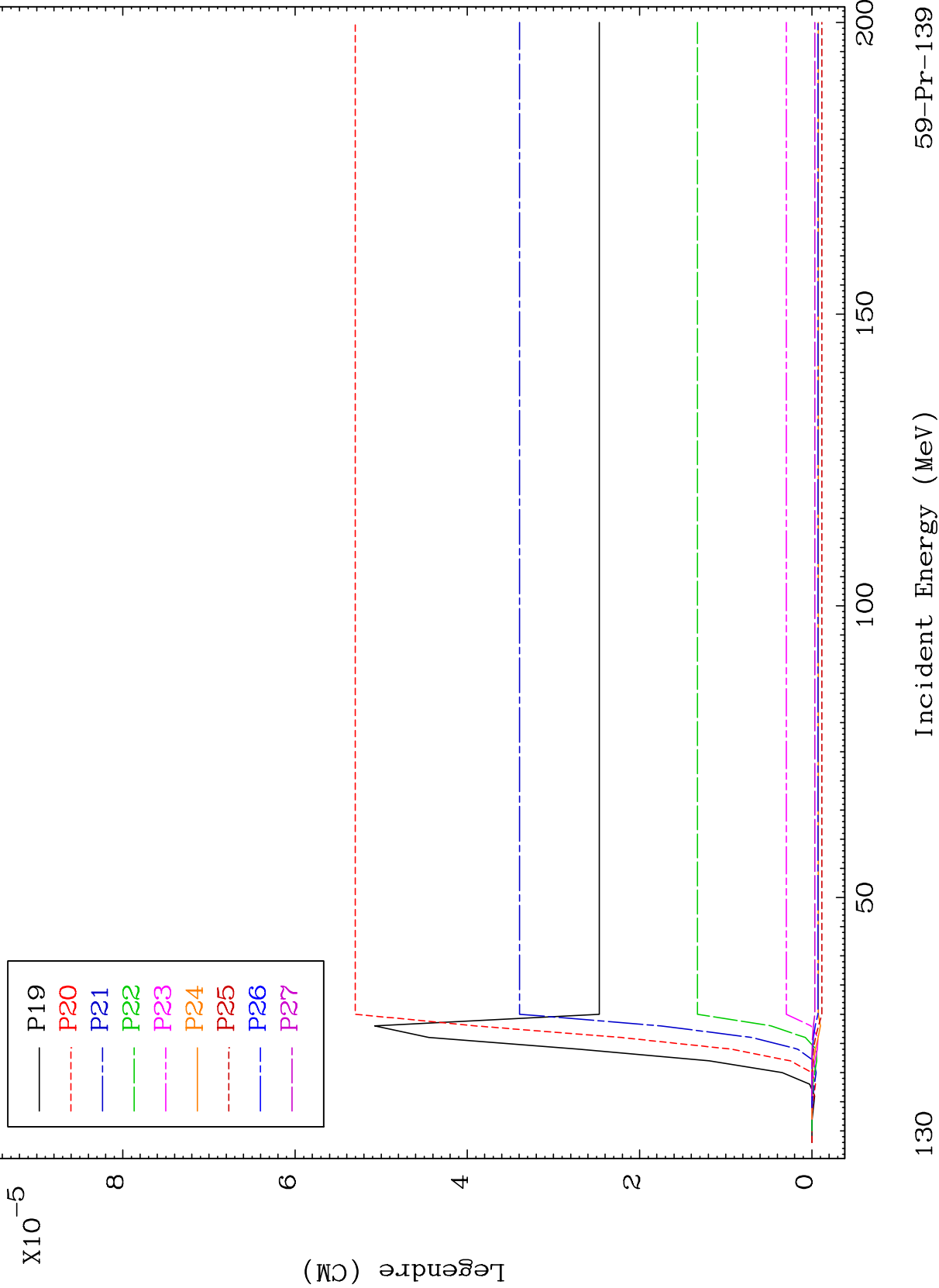
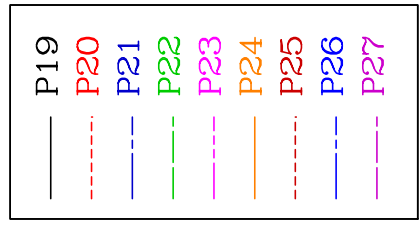
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 78 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

Incident Energy (MeV)

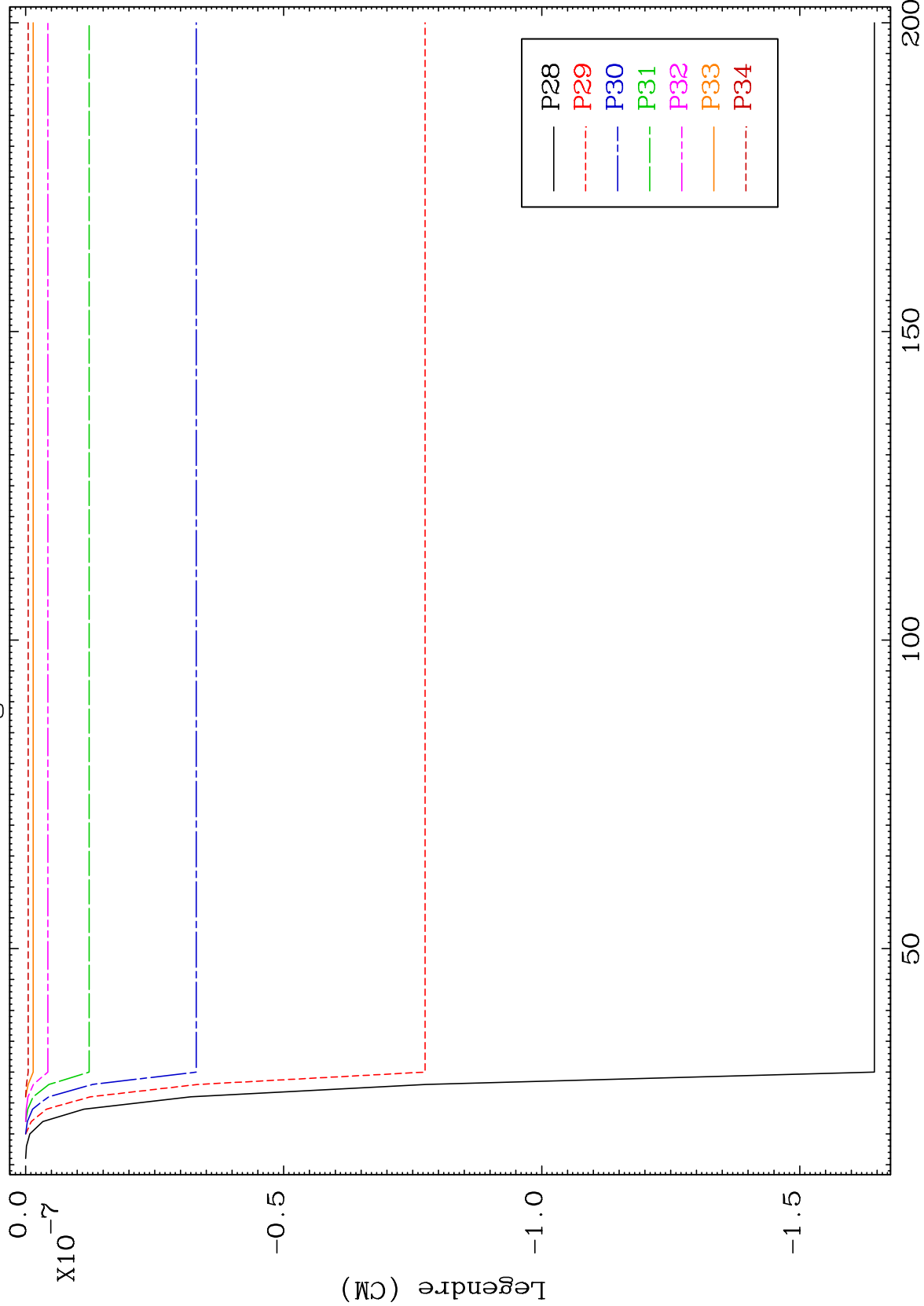
130

MAT 5919

MT= 78 (n,n') Level

59-Pr-139

Legendre Coefficients



131

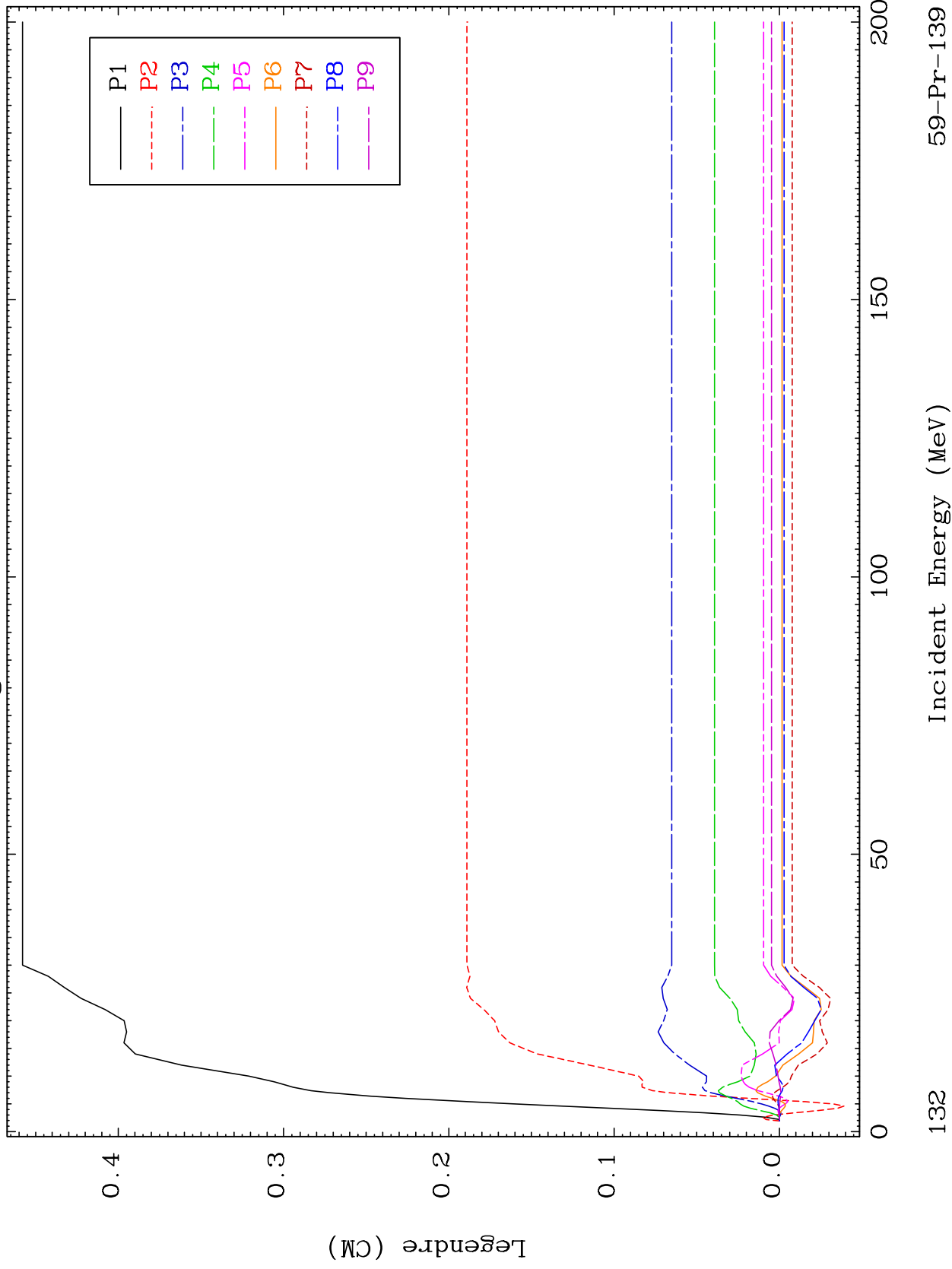
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 79 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

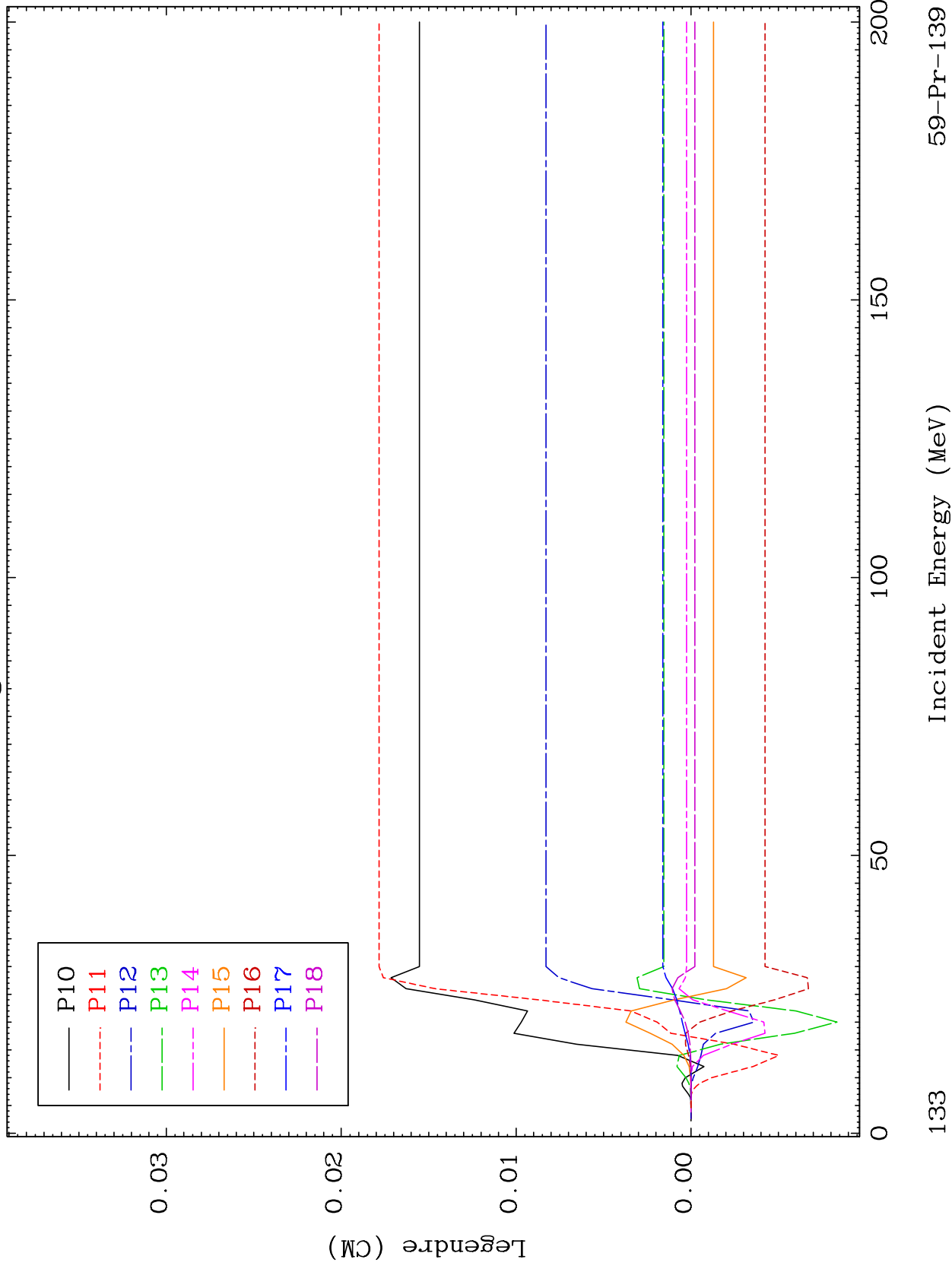
Incident Energy (MeV)

132

MAT 5919

MT= 79 (n,n') Level
Legendre Coefficients

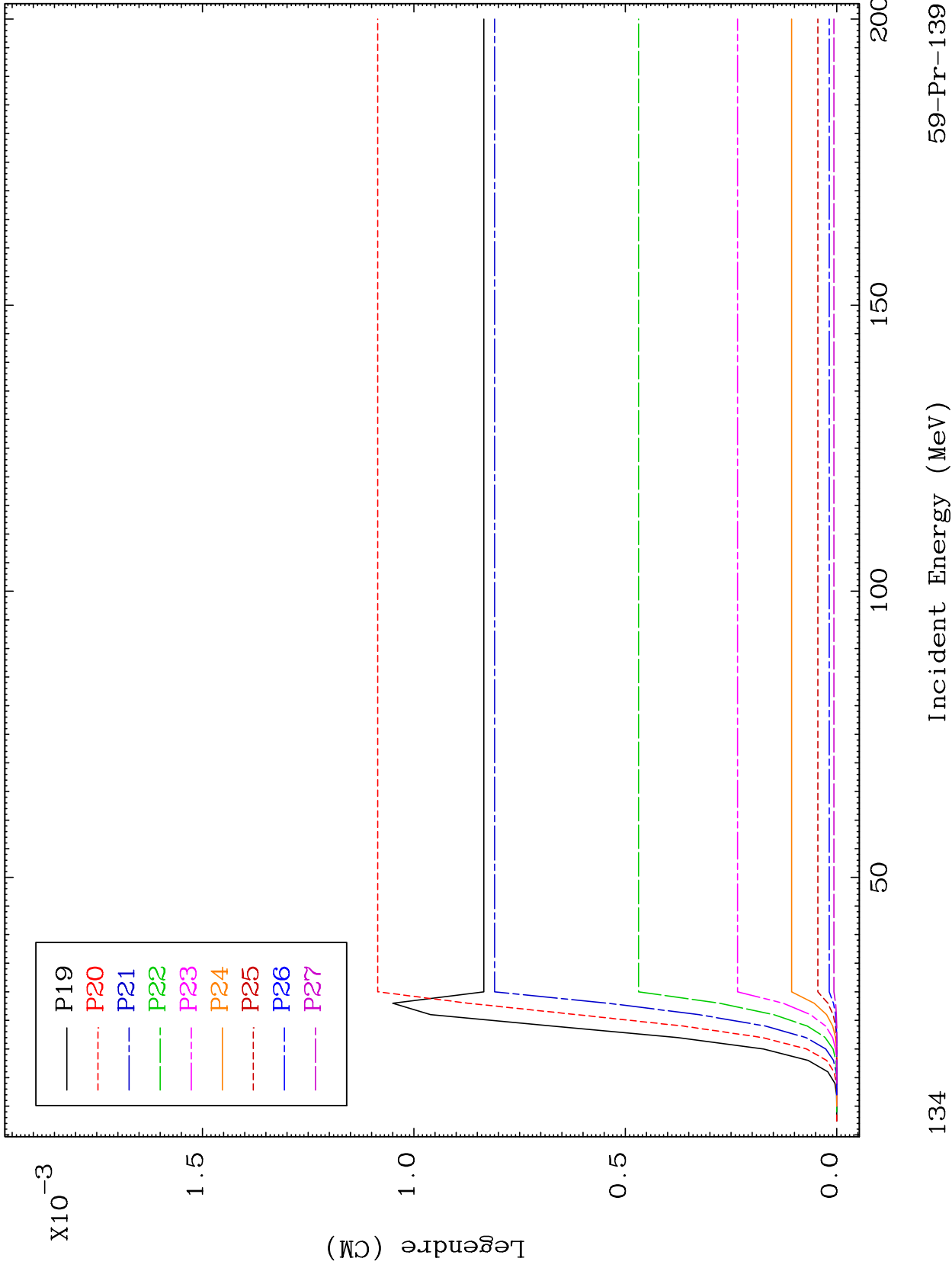
59-Pr-139



133

Incident Energy (MeV)

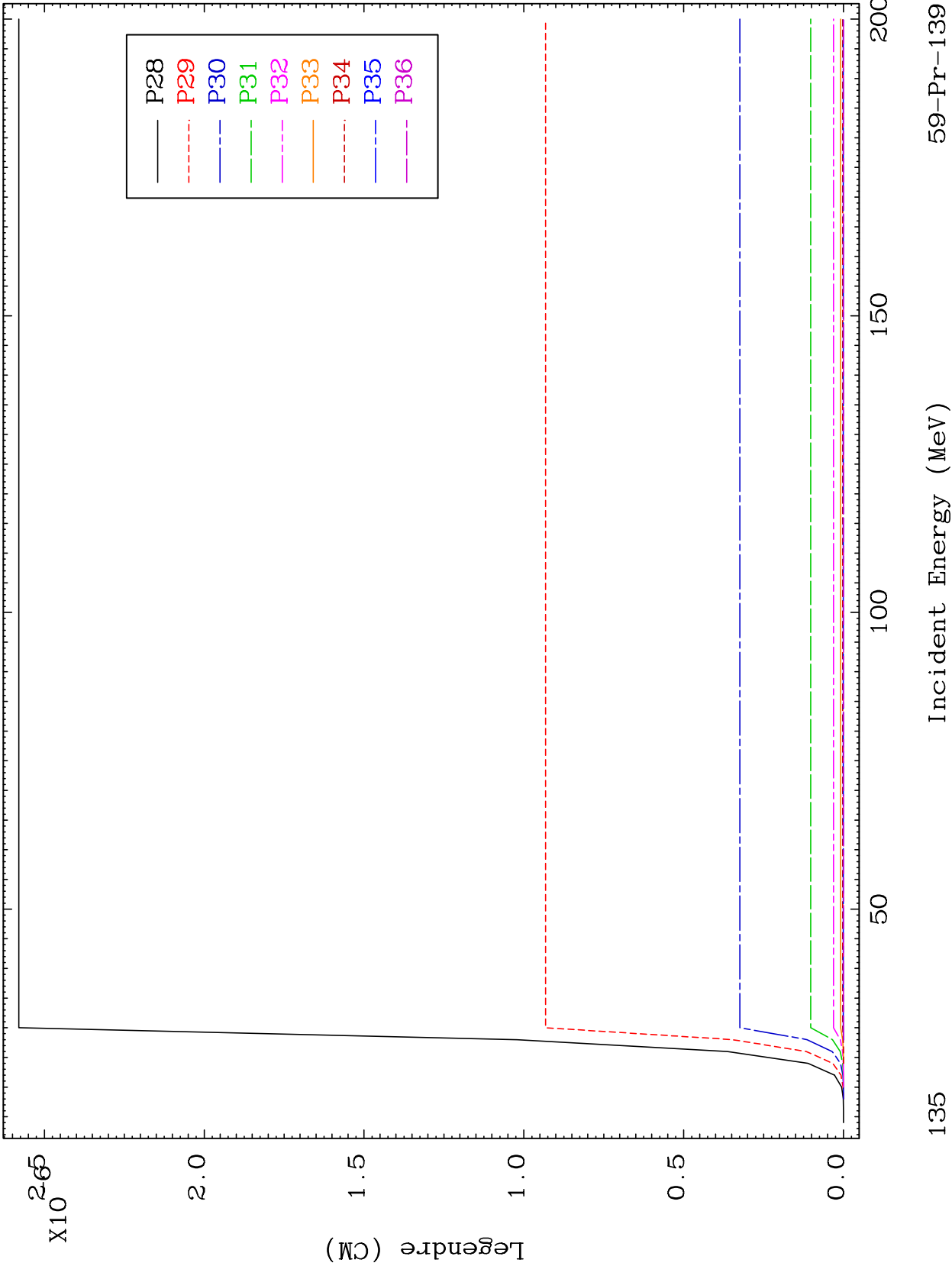
59-Pr-139



MAT 5919

MT= 79 (n,n') Level
Legendre Coefficients

59-Pr-139



135

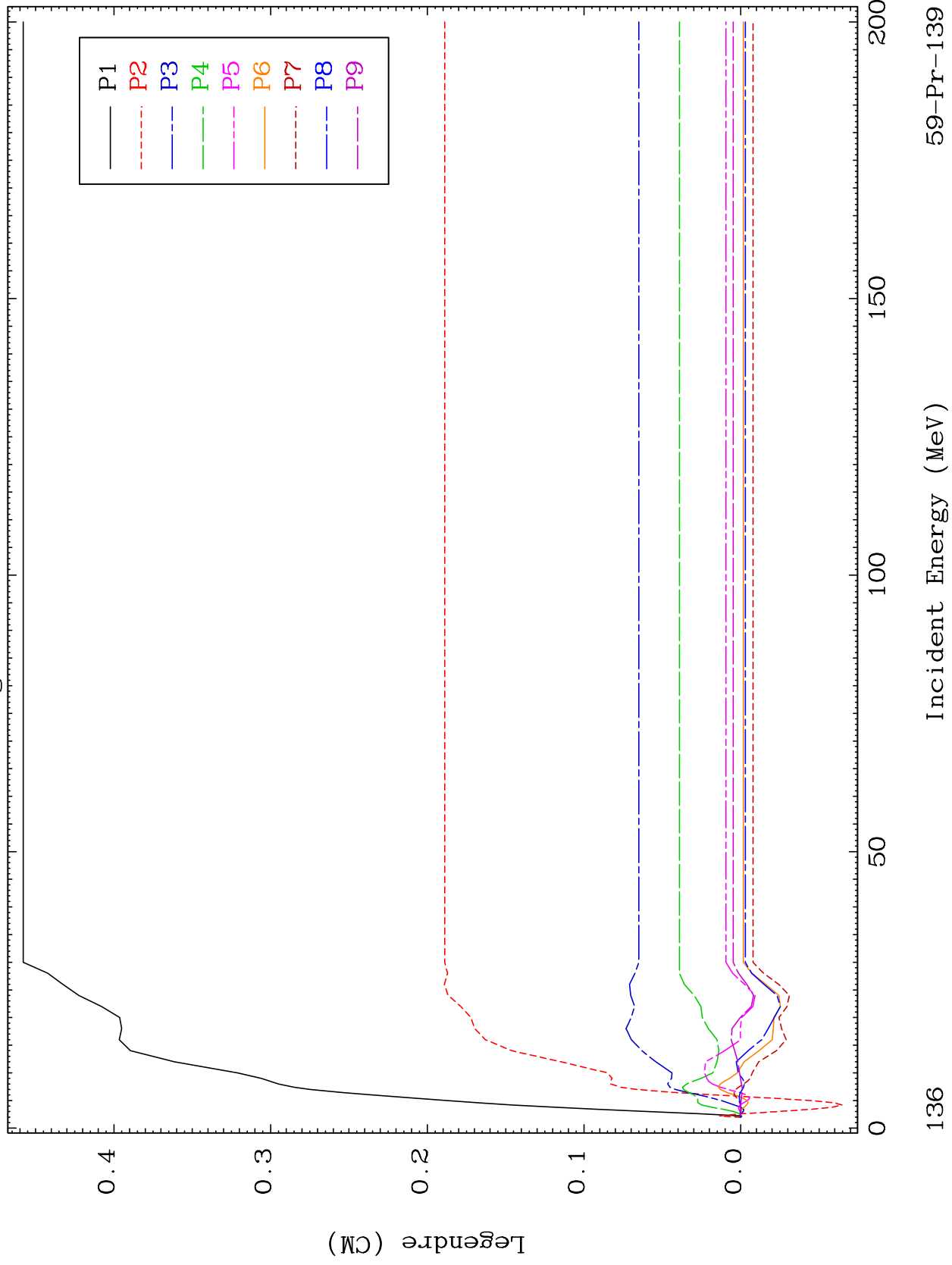
Incident Energy (MeV)

59-Pr-139

MAT 5919

MT= 80 (n,n') Level
Legendre Coefficients

59-Pr-139



59-Pr-139

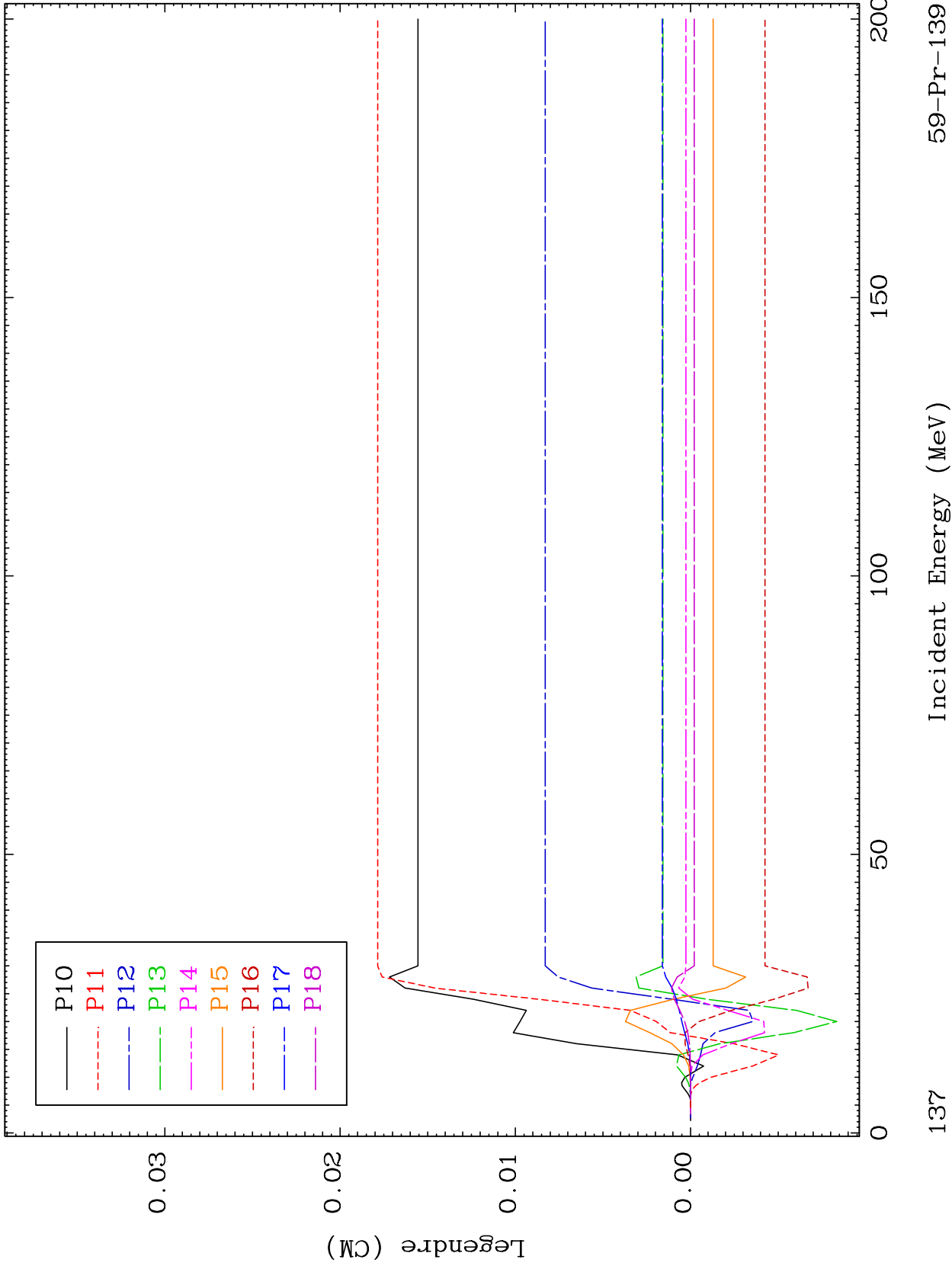
Incident Energy (MeV)

136

MAT 5919

MT= 80 (n,n') Level
Legendre Coefficients

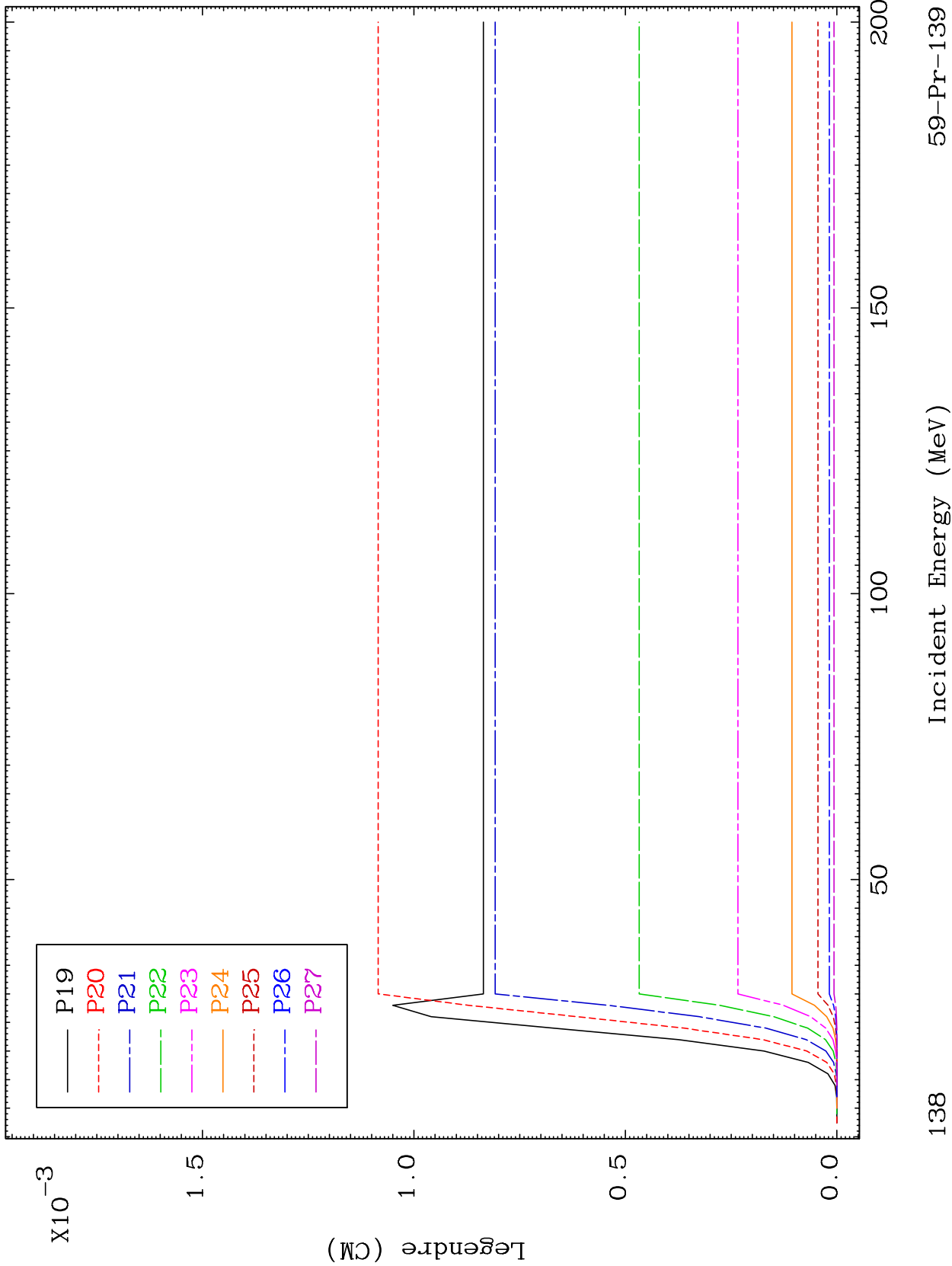
59-Pr-139



137

Incident Energy (MeV)

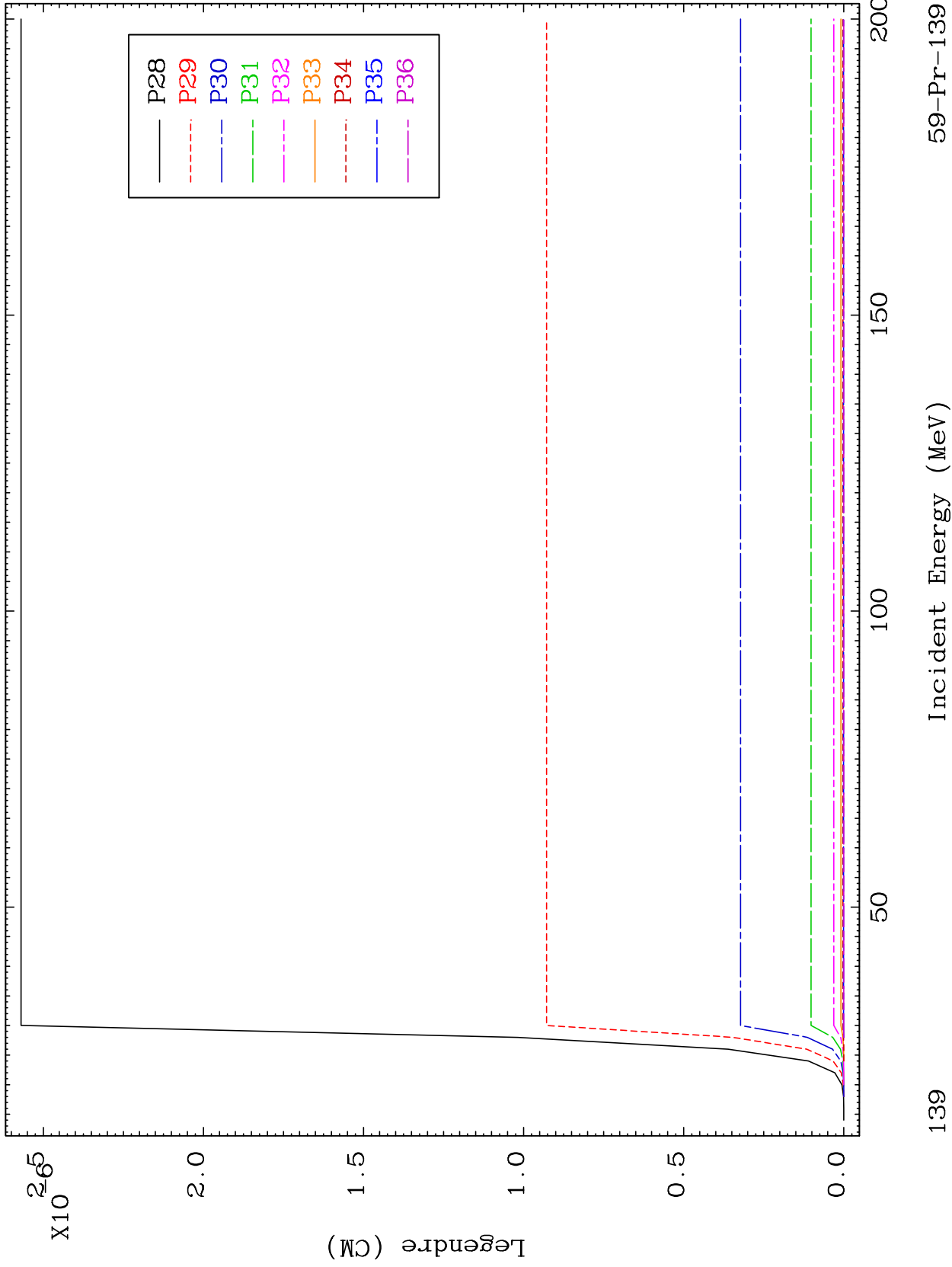
59-Pr-139



MAT 5919

MT= 80 (n,n') Level
Legendre Coefficients

59-Pr-139



139

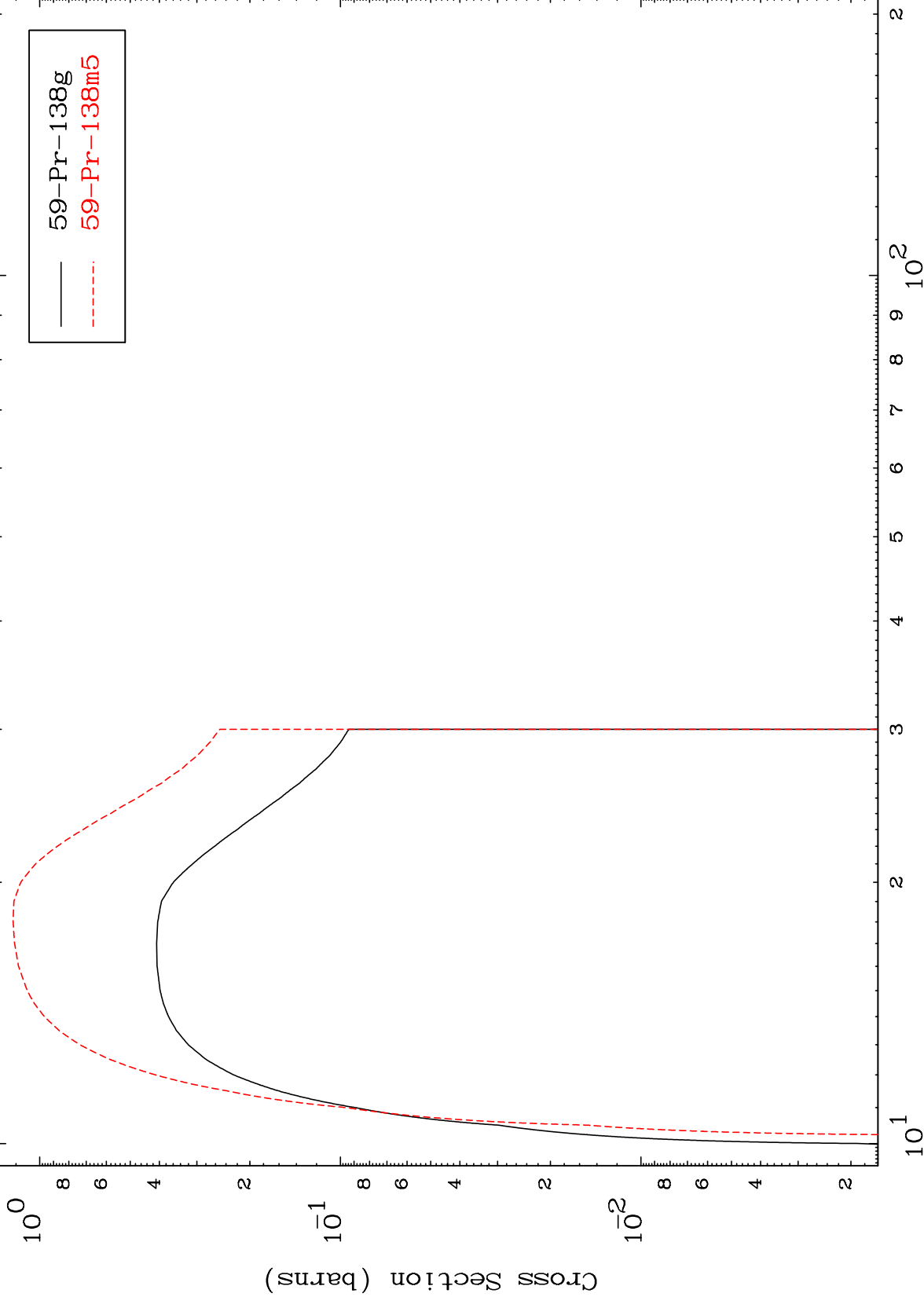
59-Pr-139

MAT 5919

(n,2n)

59-Pr-139

Radionuclide Production Cross Section



59-Pr-138g
59-Pr-138m5

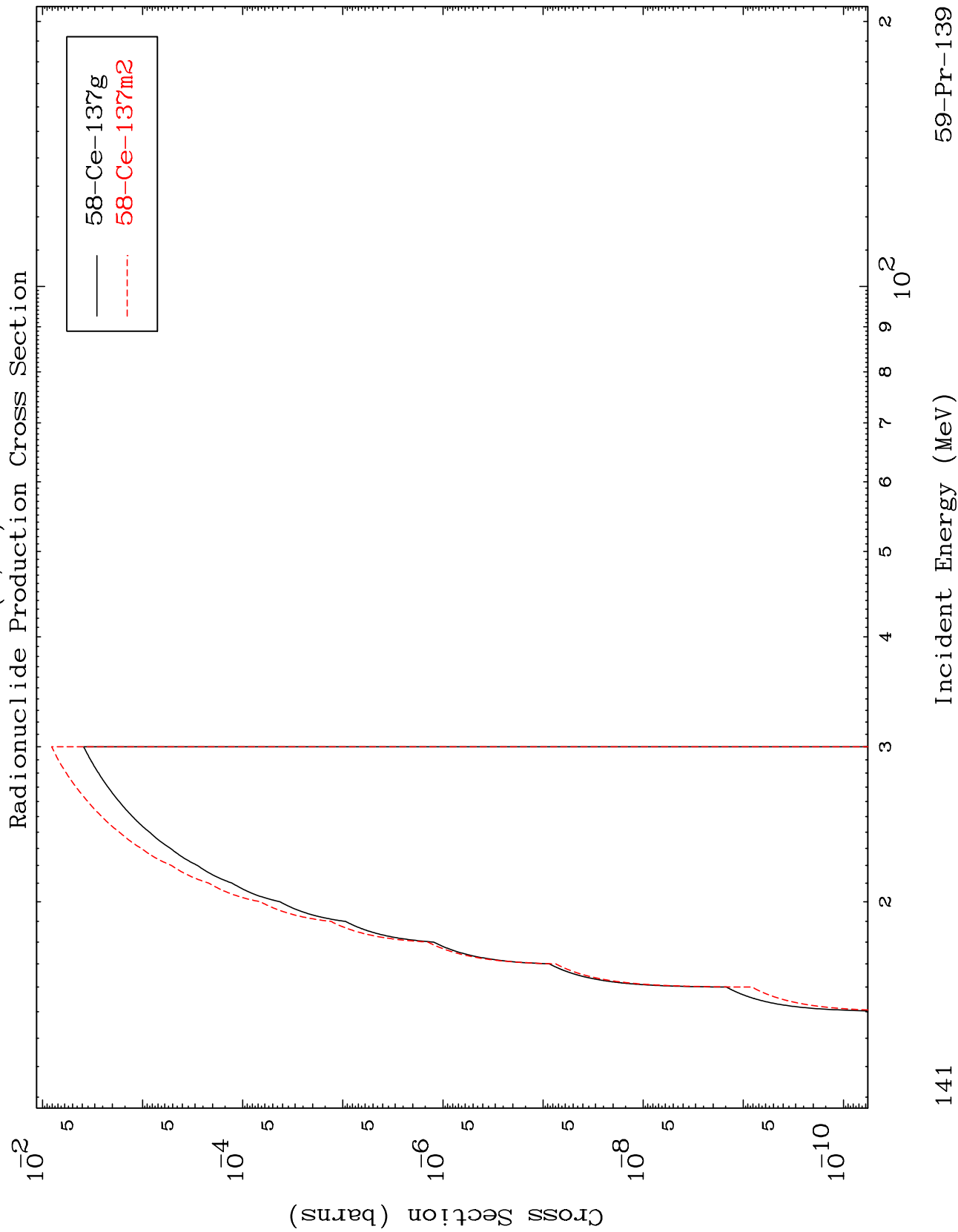
Incident Energy (MeV)

59-Pr-139

MAT 5919

(n,n') d

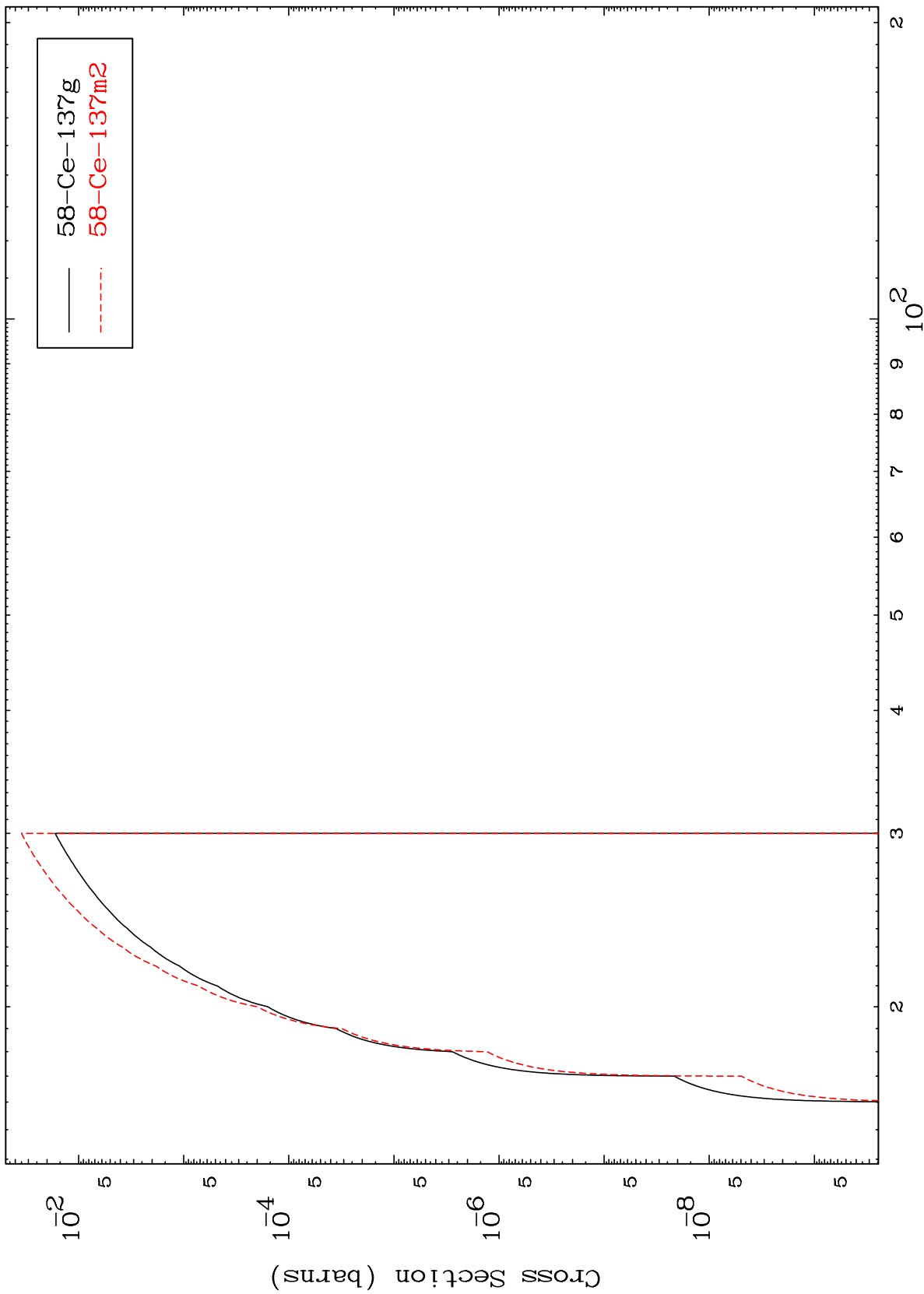
59-Pr-139



141

59-Pr-139

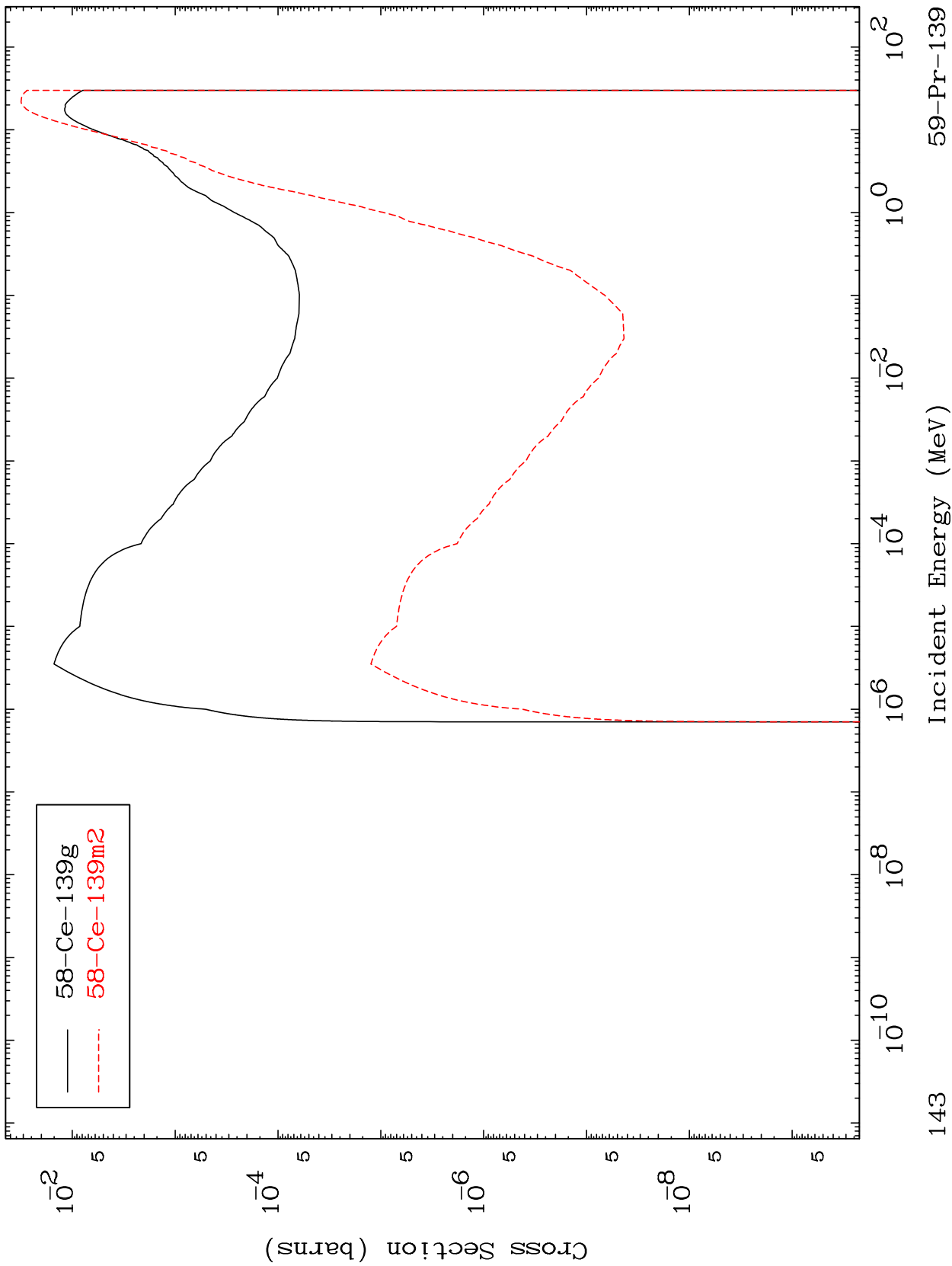
Radionuclide Production Cross Section



MAT 5919

59-Pr-139

(n,p)
Radionuclide Production Cross Section

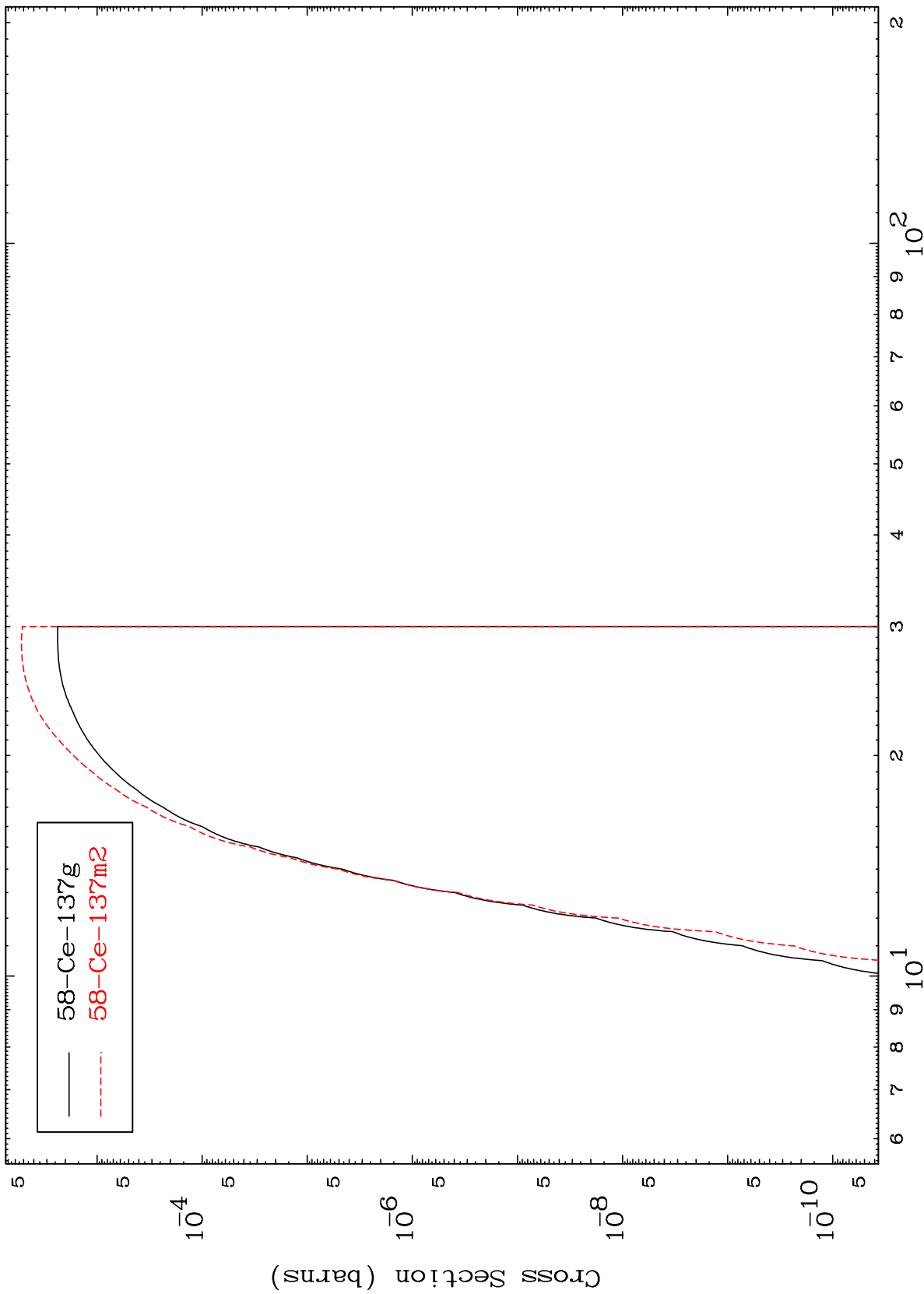


— 58-Ce-139g
- - - 58-Ce-139m2

MAT 5919

59-Pr-139

(n, t)
Radionuclide Production Cross Section



58-Ce-137g
58-Ce-137m2

59-Pr-139

Incident Energy (MeV)

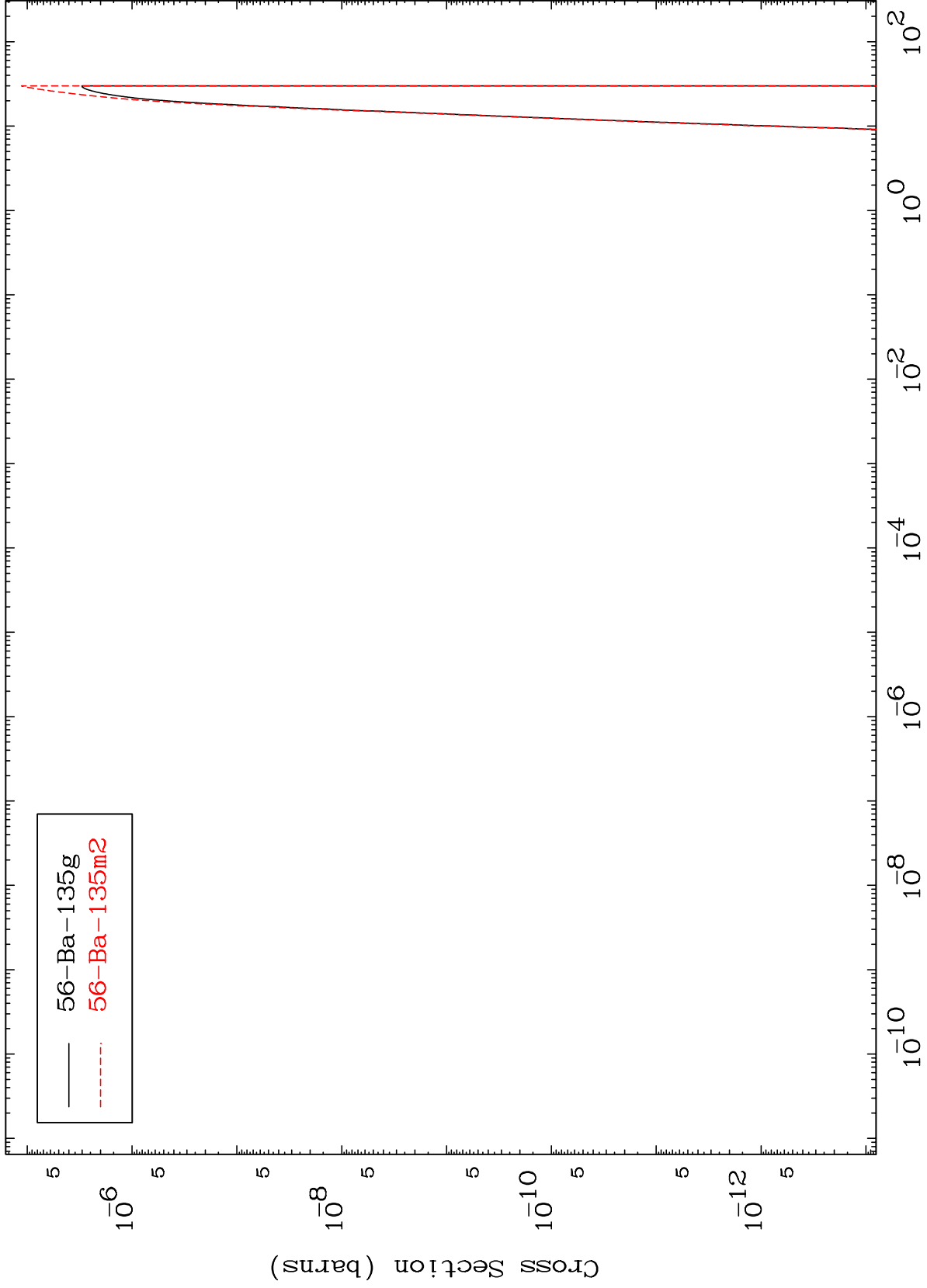
144

MAT 5919

(n,p) α

59-Pr-139

Radionuclide Production Cross Section



145

Incident Energy (MeV)

59-Pr-139