

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

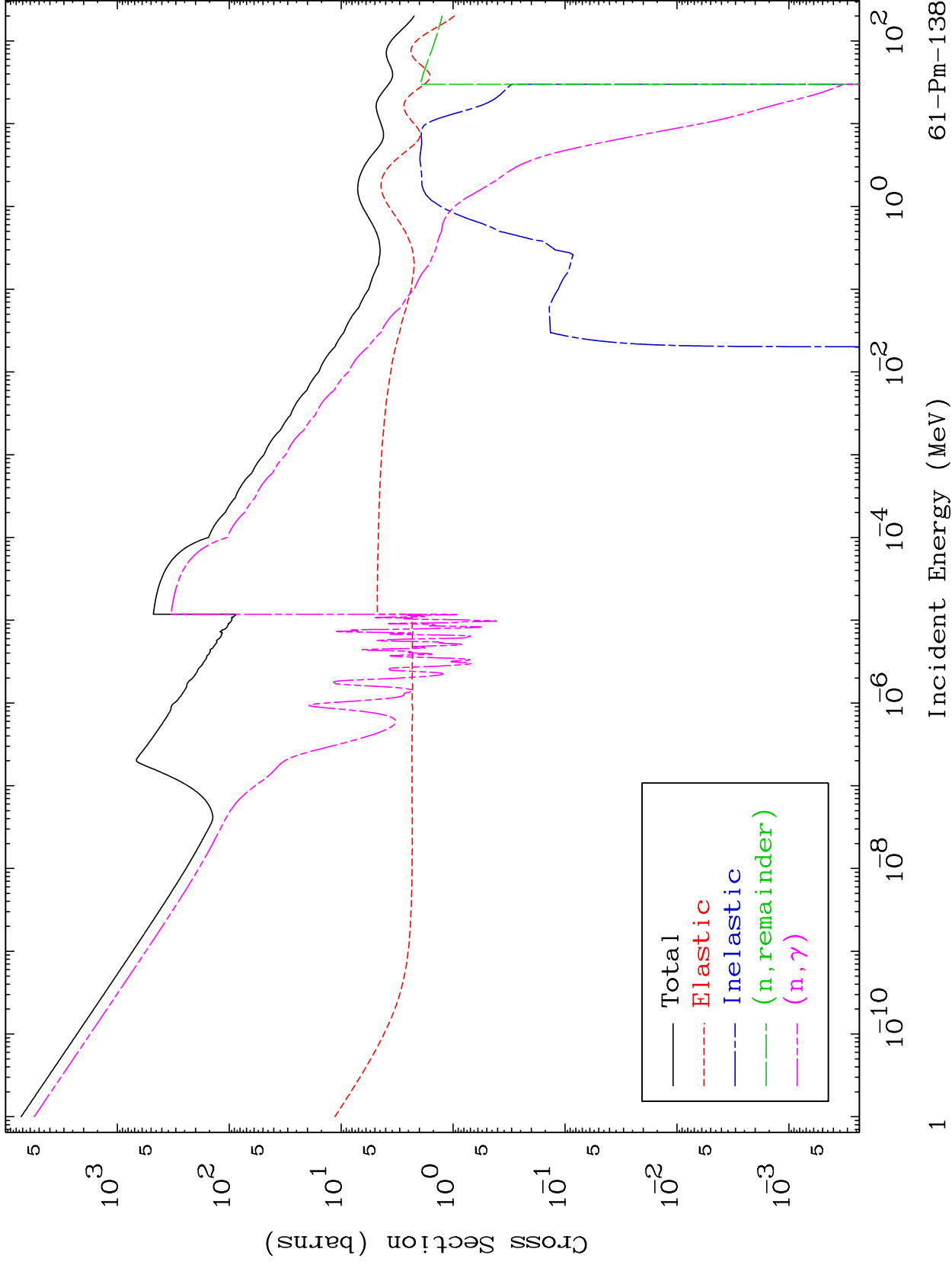
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 6122

Major
293 Kelvin Cross Sections

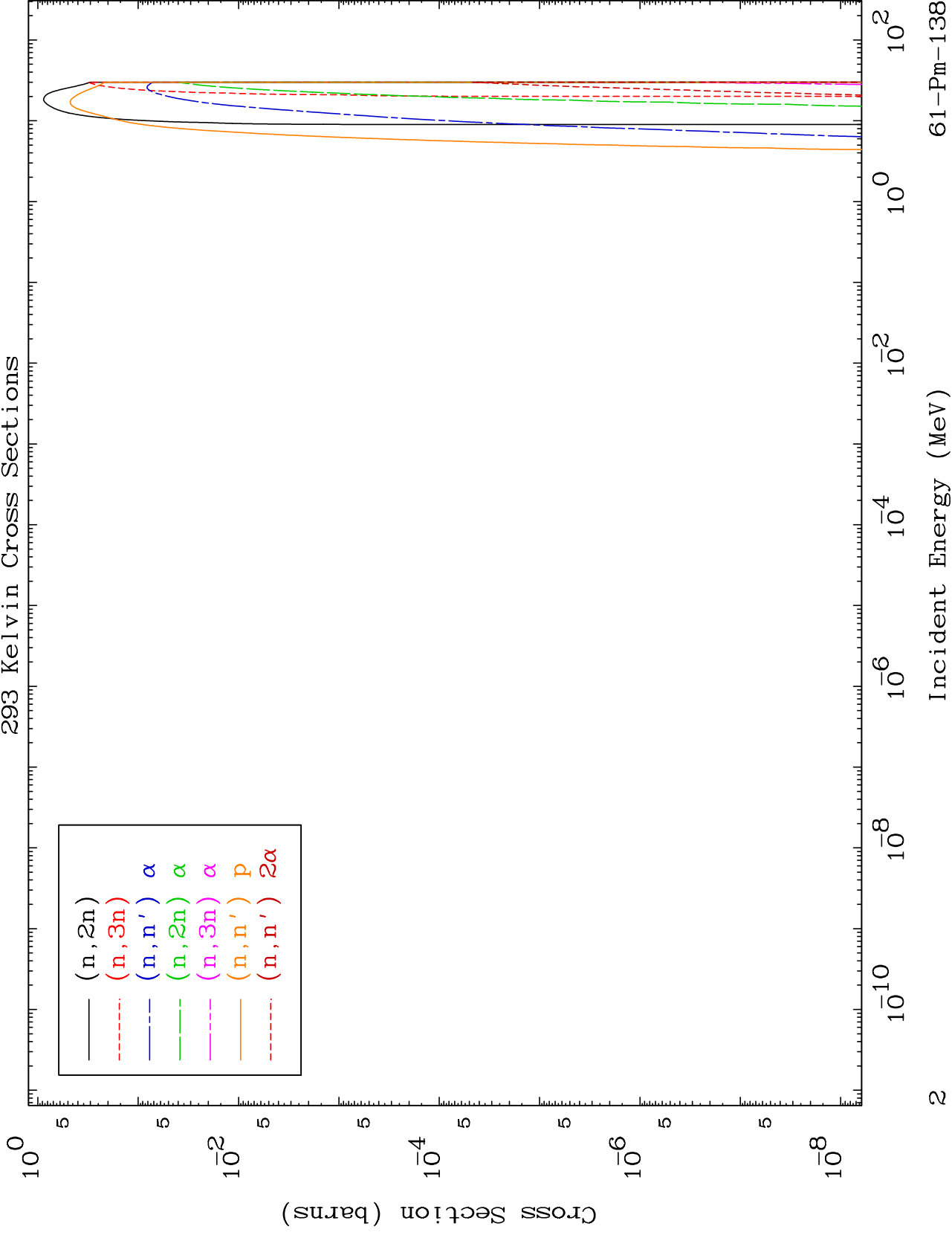
61-Pm-138

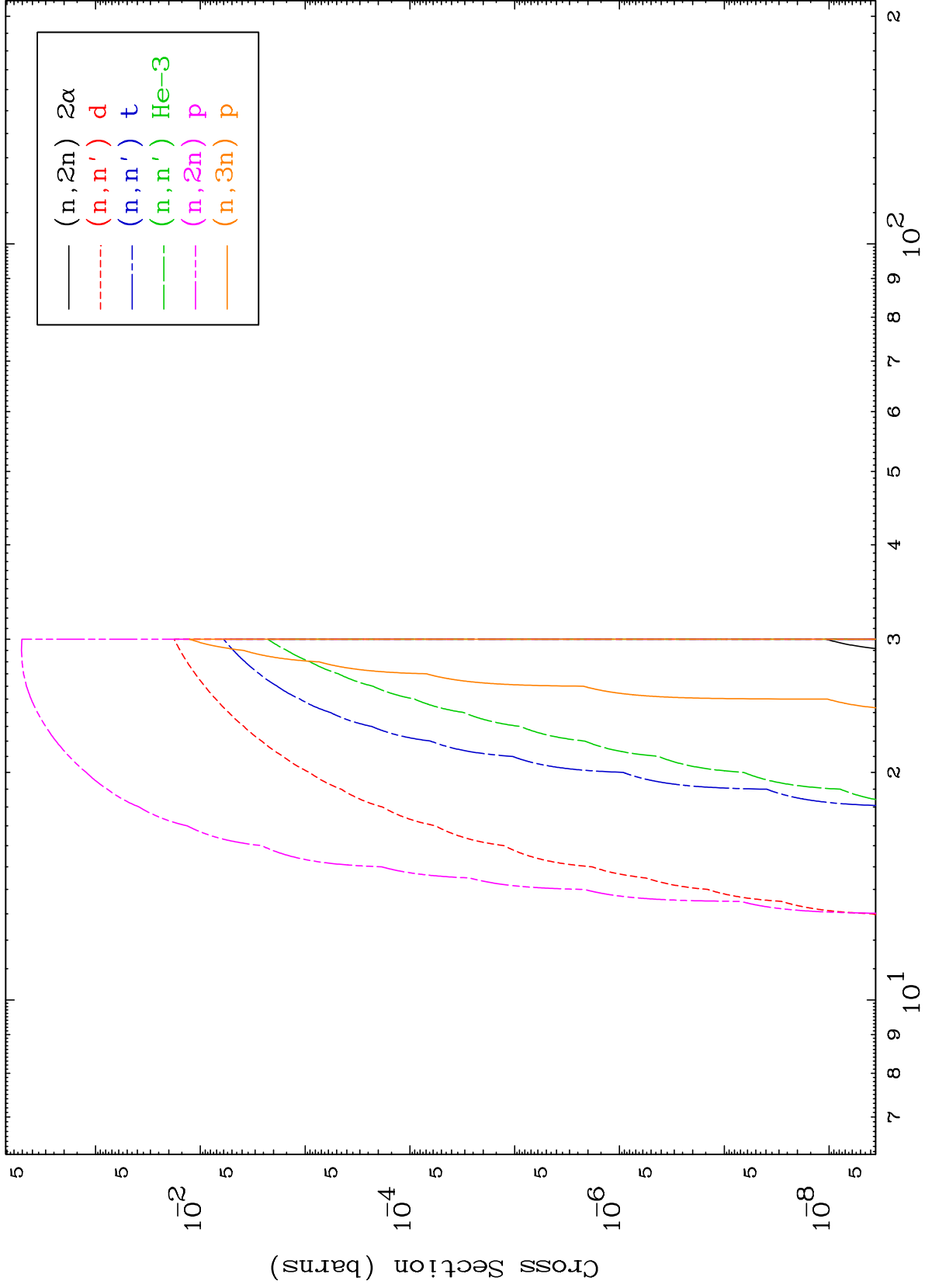


MAT 6122

Neutron Production
293 Kelvin Cross Sections

61-Pm-138

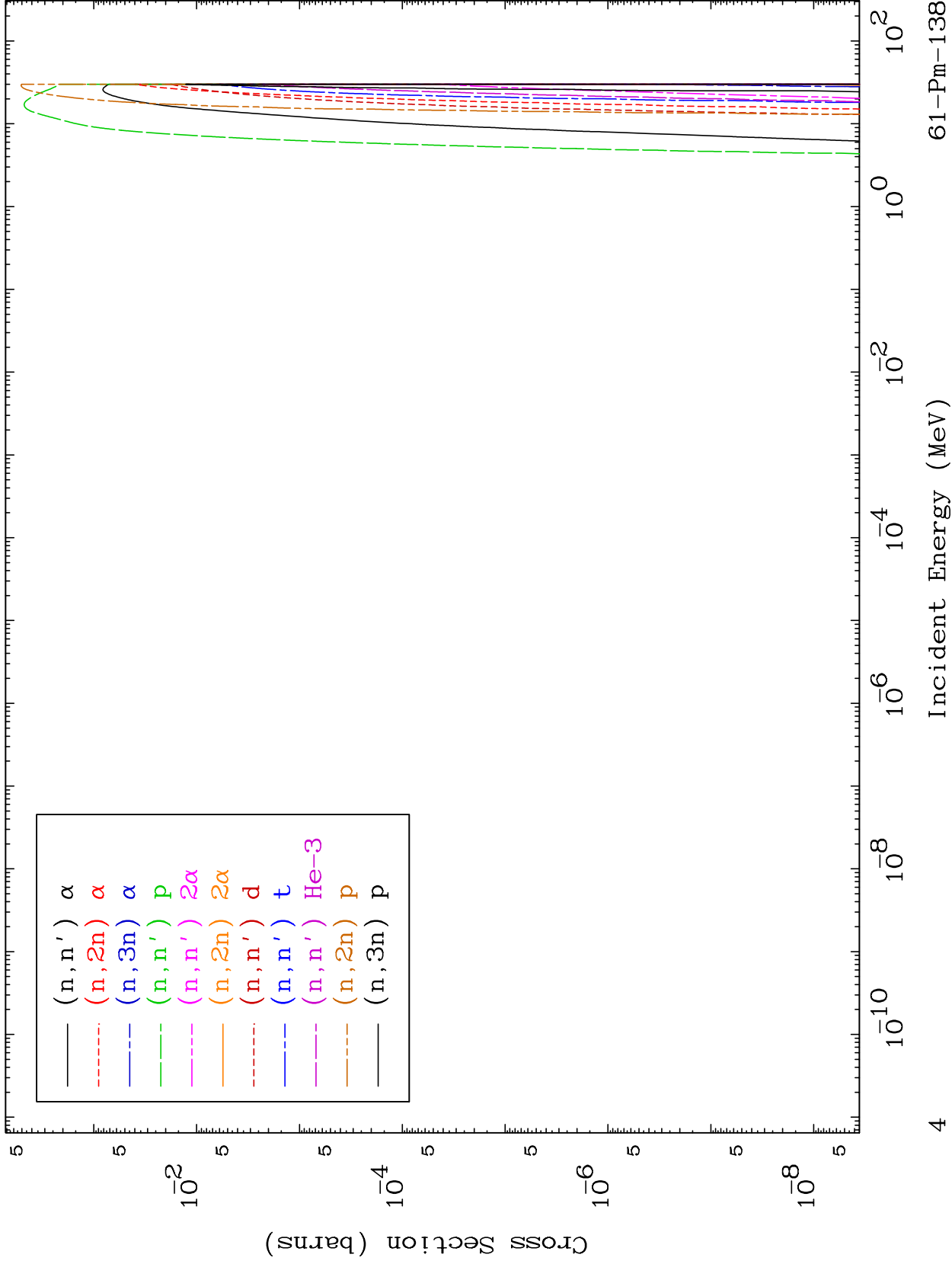




MAT 6122

Charged Particle
293 Kelvin Cross Sections

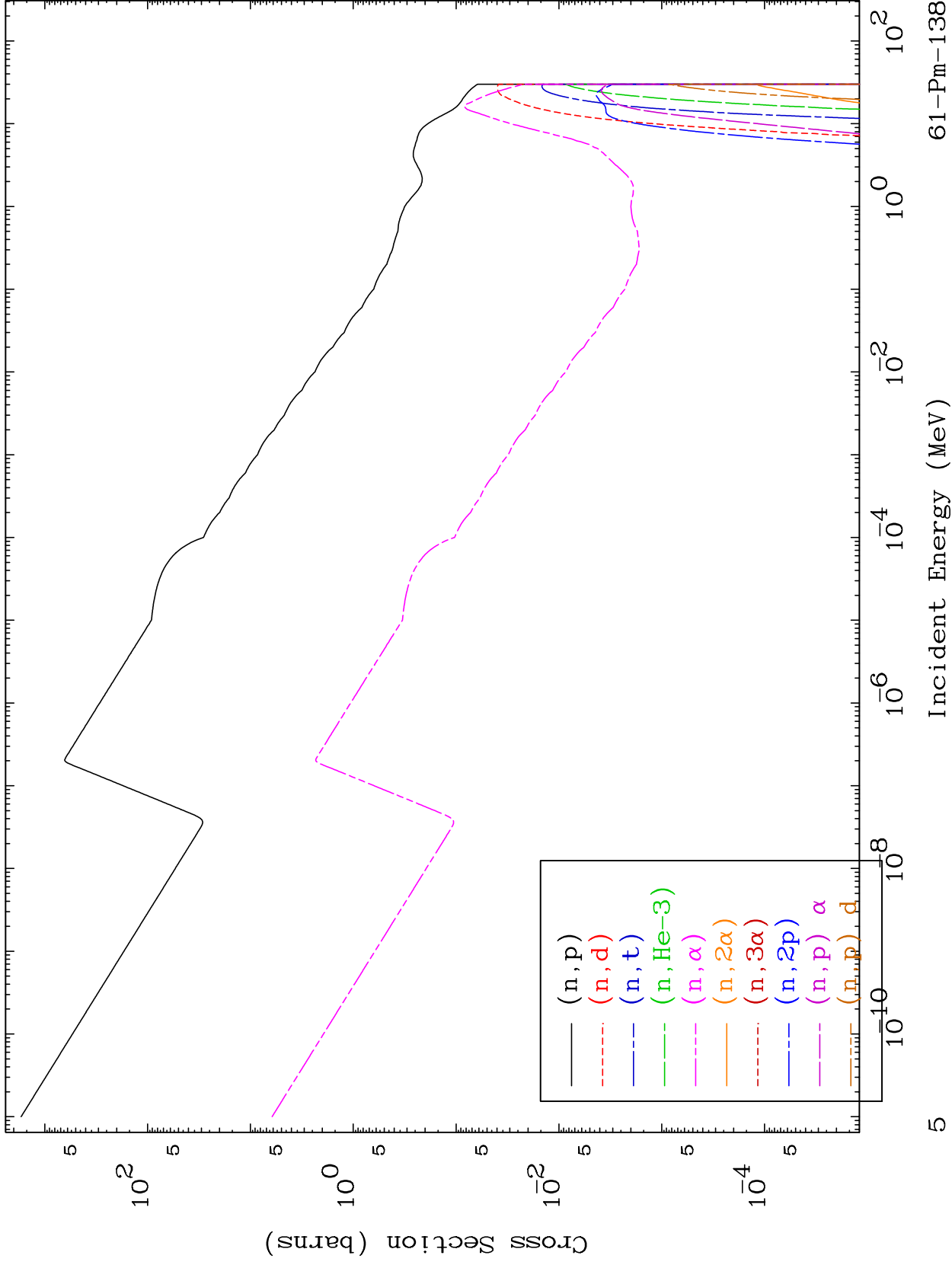
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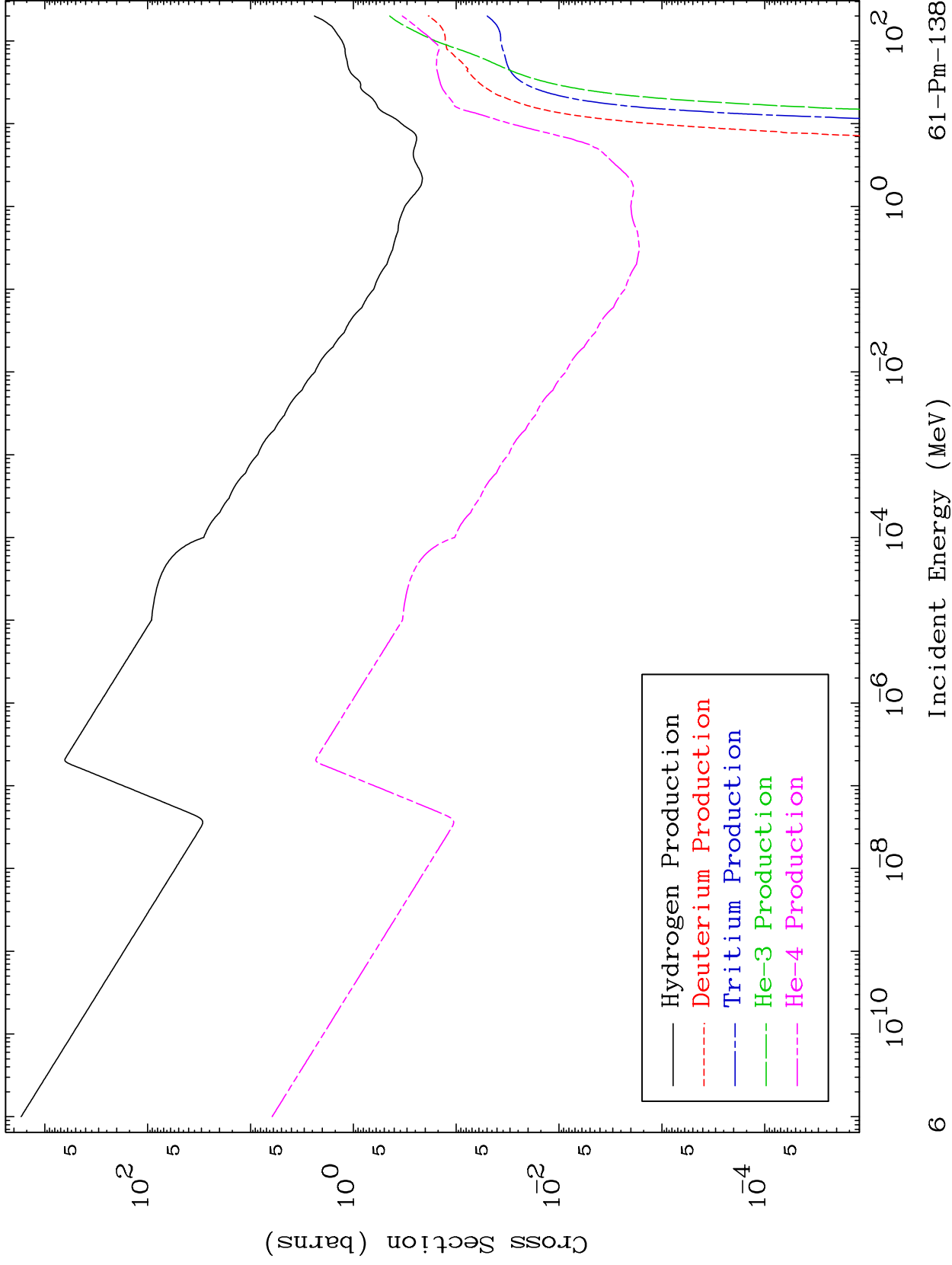


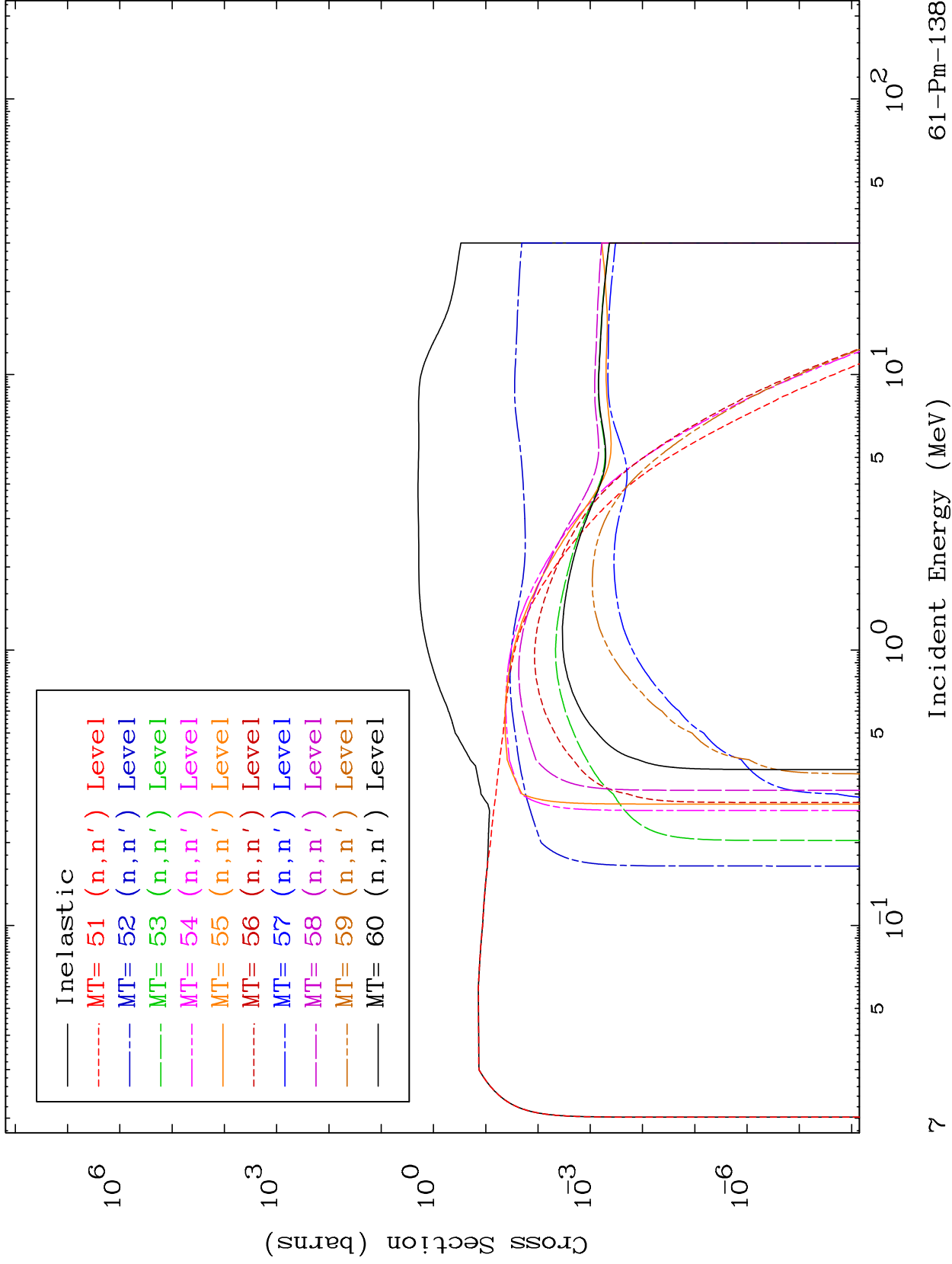
MAT 6122

Charged Particle
293 Kelvin Cross Sections

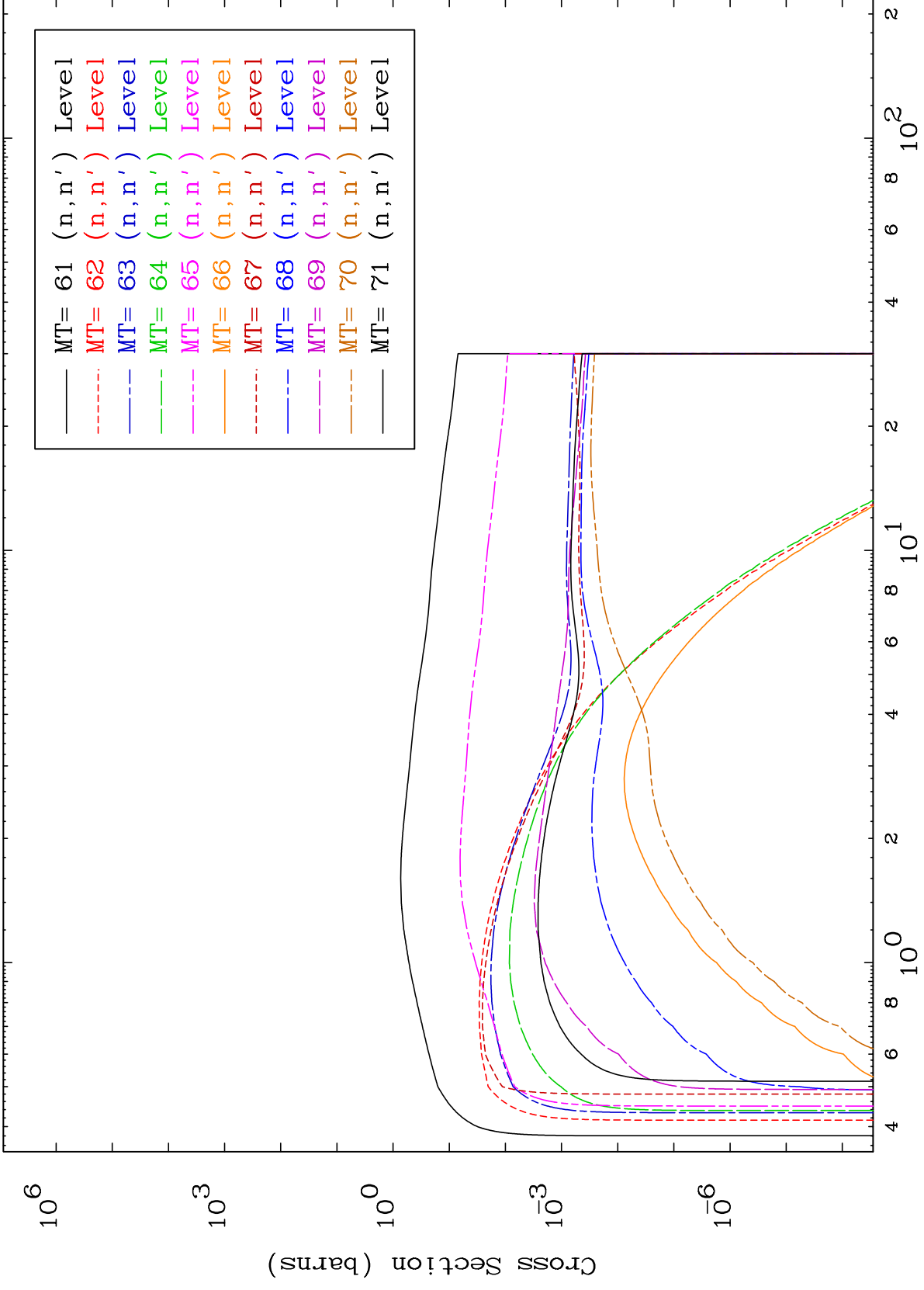
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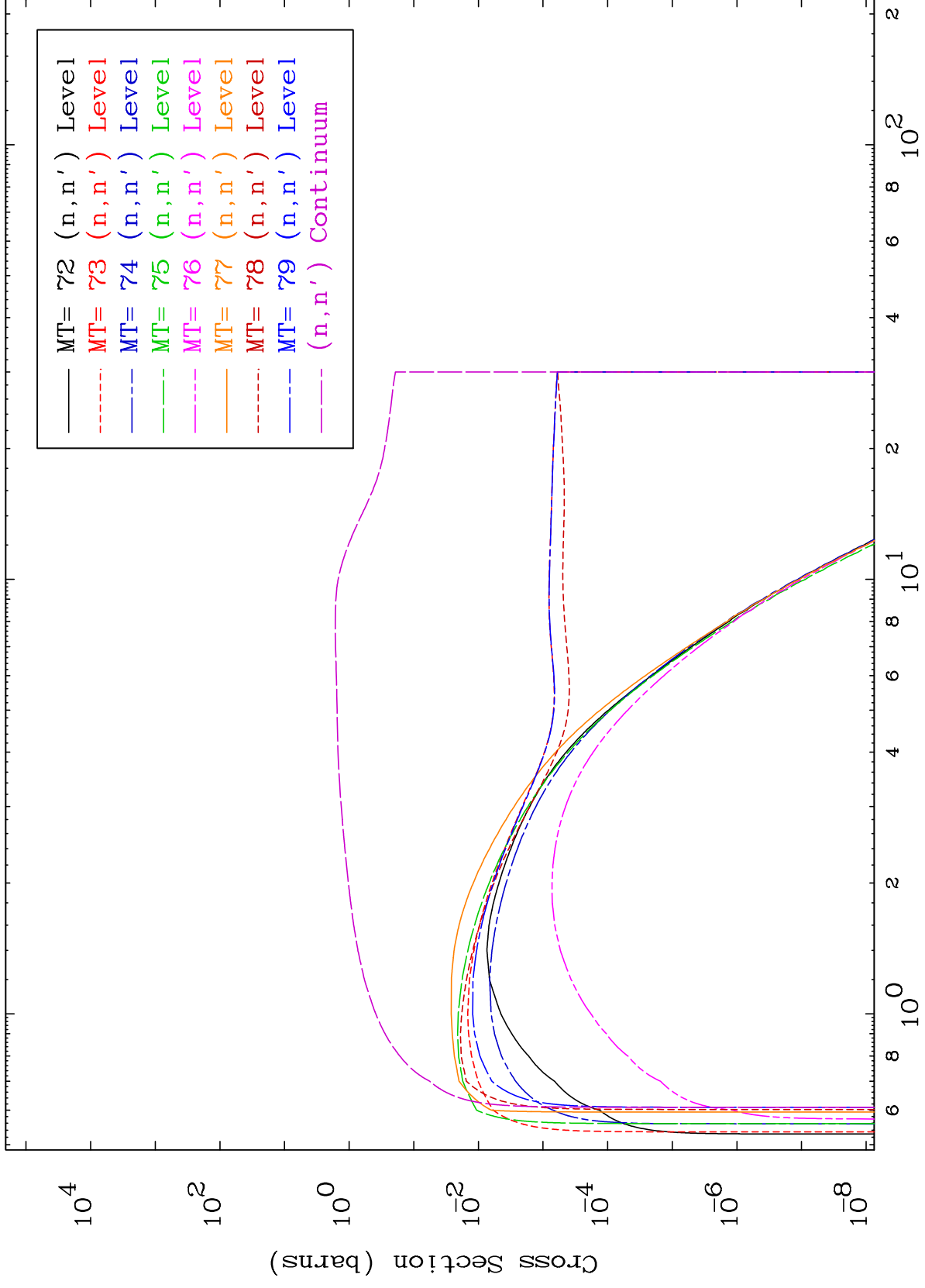




293 Kelvin Cross Sections



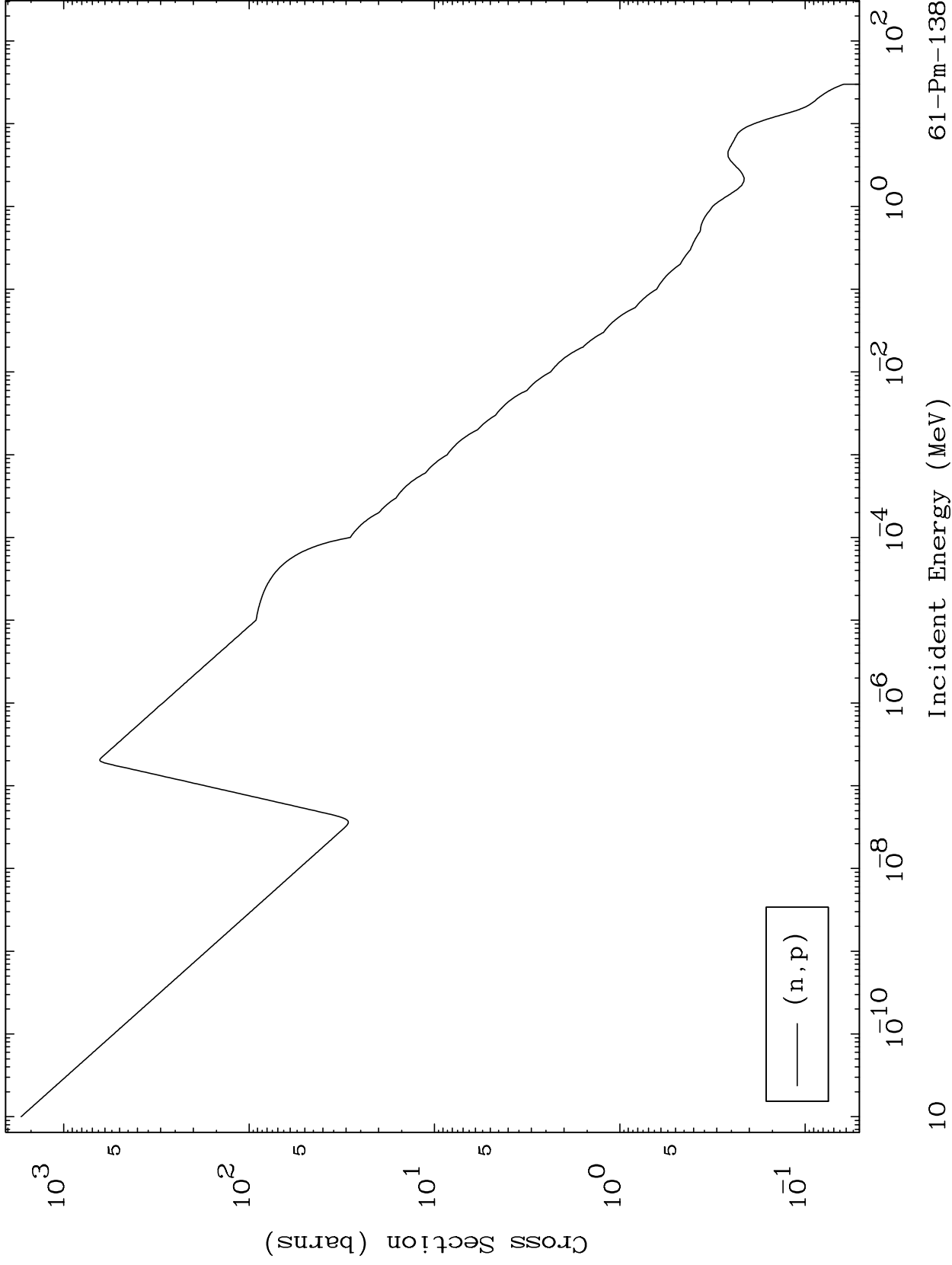
Line Style	MT=	(n,n')	Level
Solid	61	(n,n')	Level
Dashed	62	(n,n')	Level
Dash-dot	63	(n,n')	Level
Dashed	64	(n,n')	Level
Dash-dot	65	(n,n')	Level
Solid	66	(n,n')	Level
Dashed	67	(n,n')	Level
Dash-dot	68	(n,n')	Level
Dash-dot	69	(n,n')	Level
Dashed	70	(n,n')	Level
Solid	71	(n,n')	Level



MAT 6122

(n,p) Levels
293 Kelvin Cross Sections

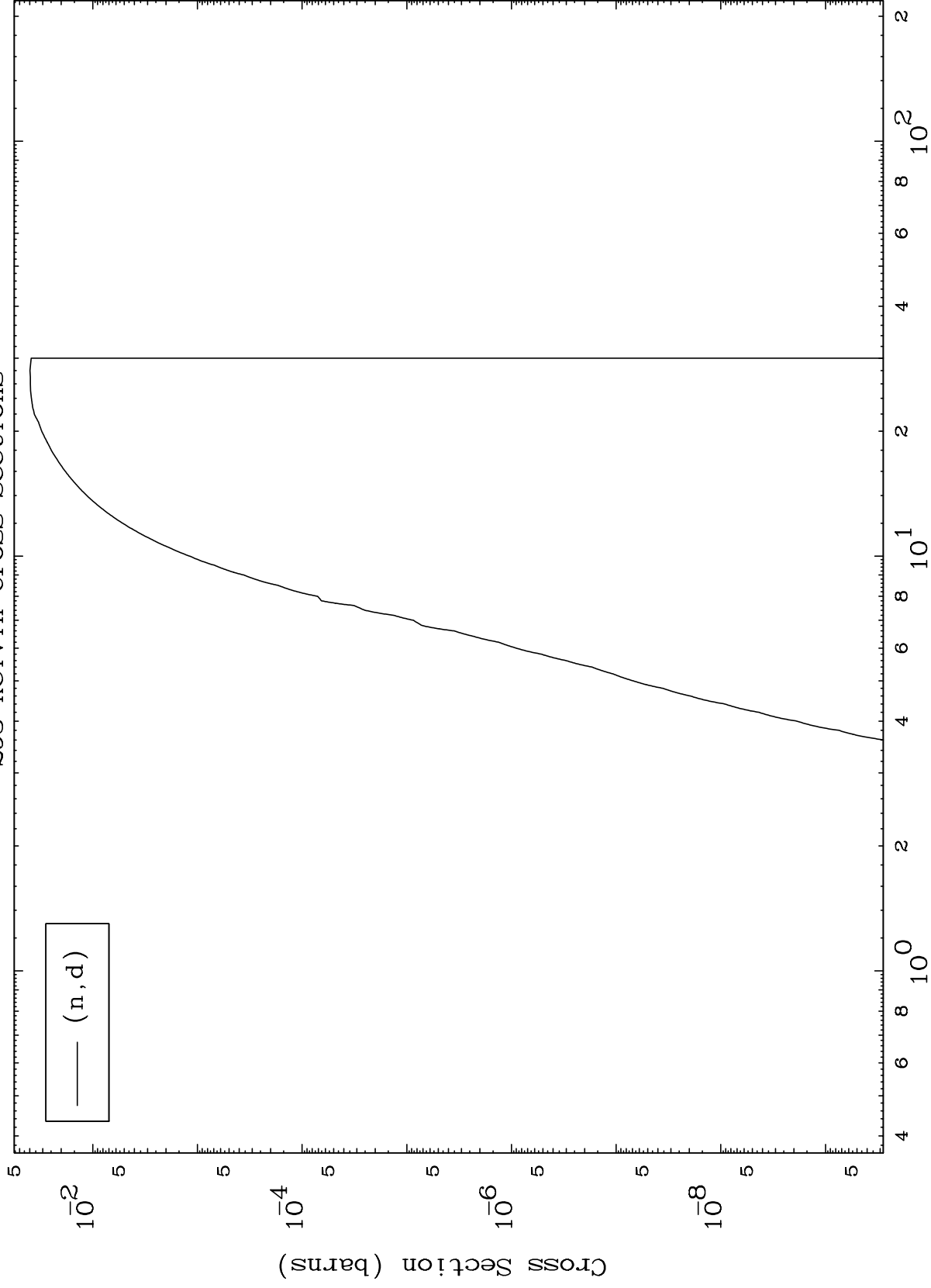
61-Pm-138



MAT 6122

(n,d) Levels
293 Kelvin Cross Sections

61-Pm-138



11

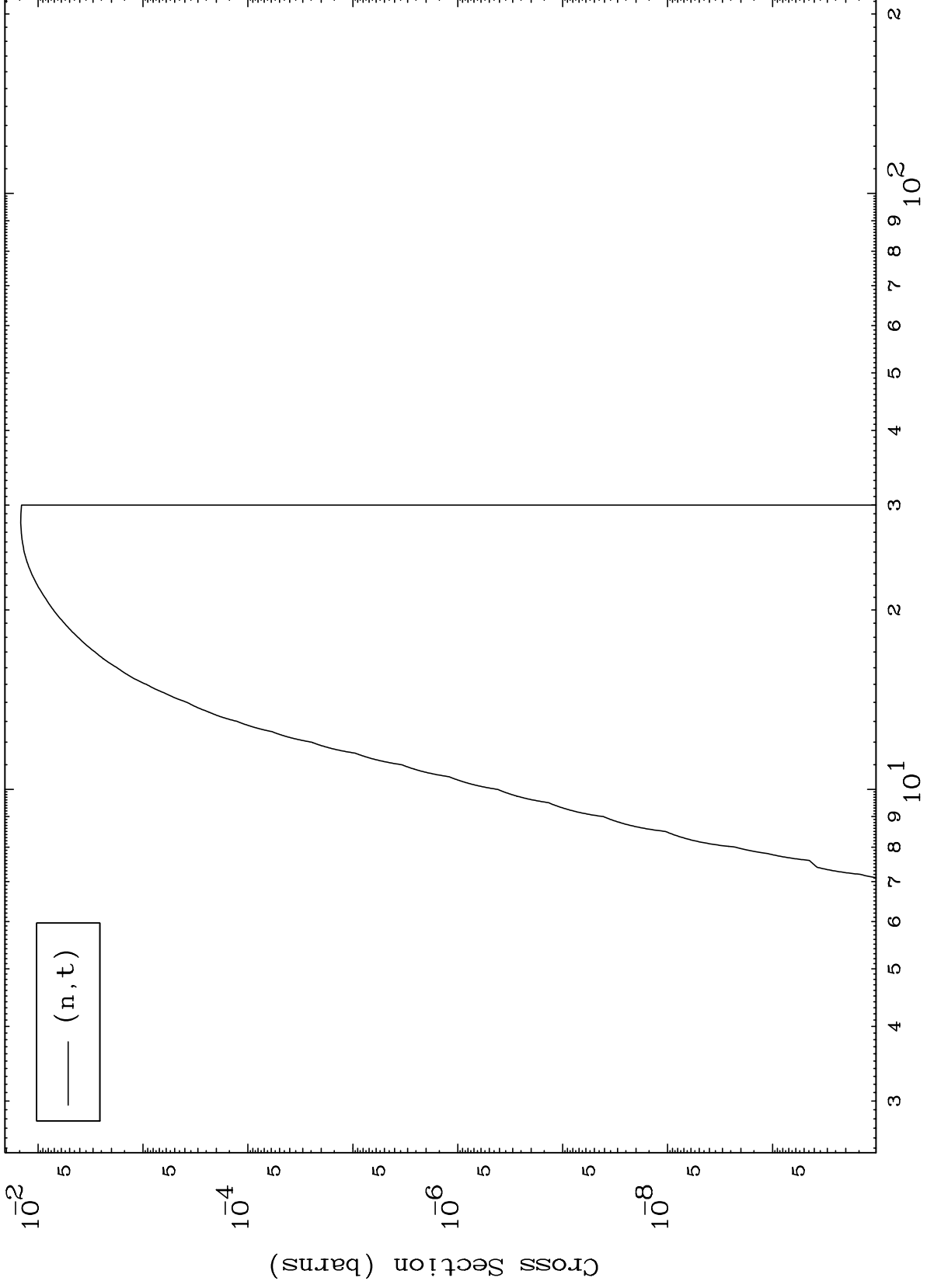
Incident Energy (MeV)

61-Pm-138

MAT 6122

(n,t) Levels
293 Kelvin Cross Sections

61-Pm-138



(n,t)

12

Incident Energy (MeV)

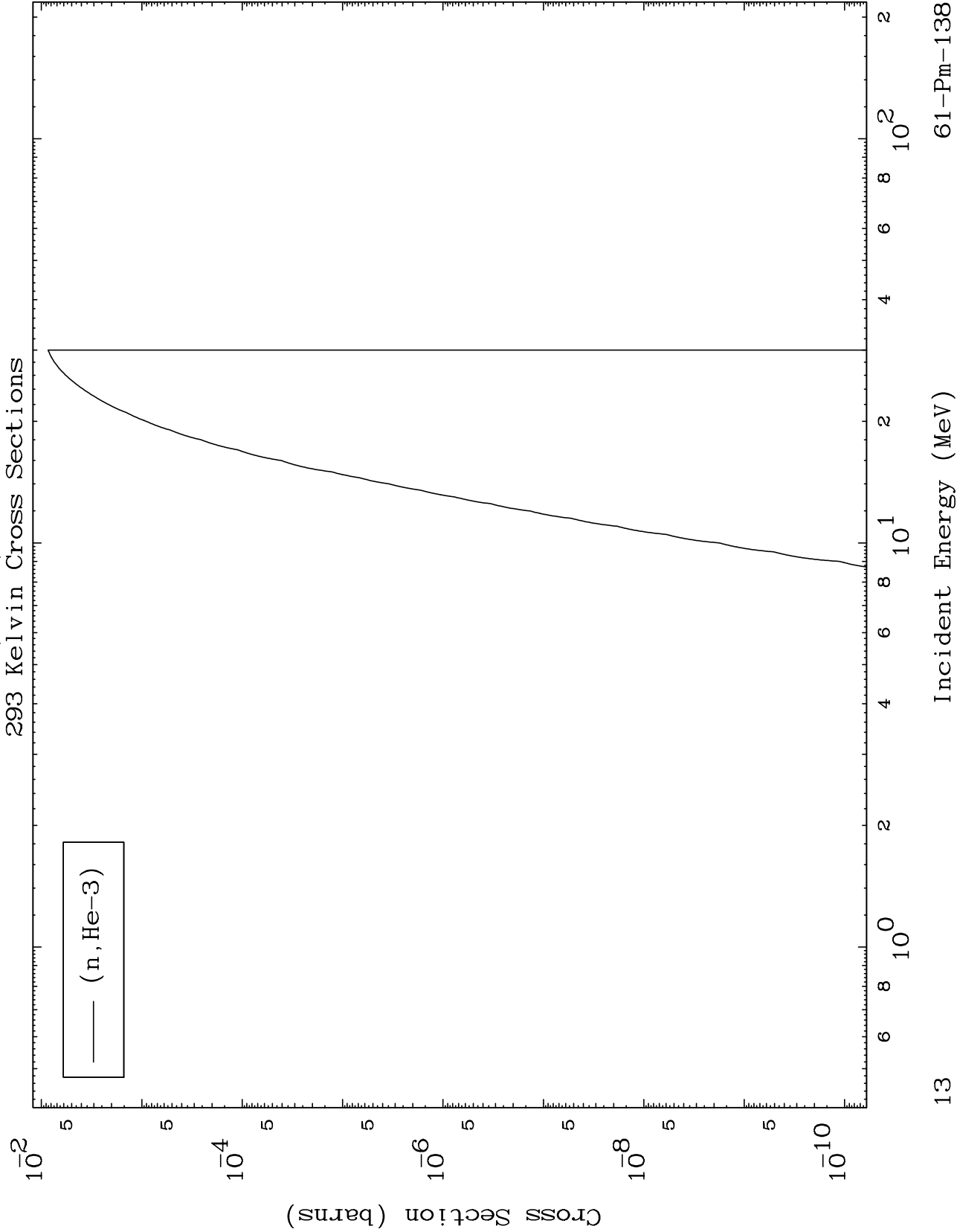
61-Pm-138

MAT 6122

(n,He3) Levels

61-Pm-138

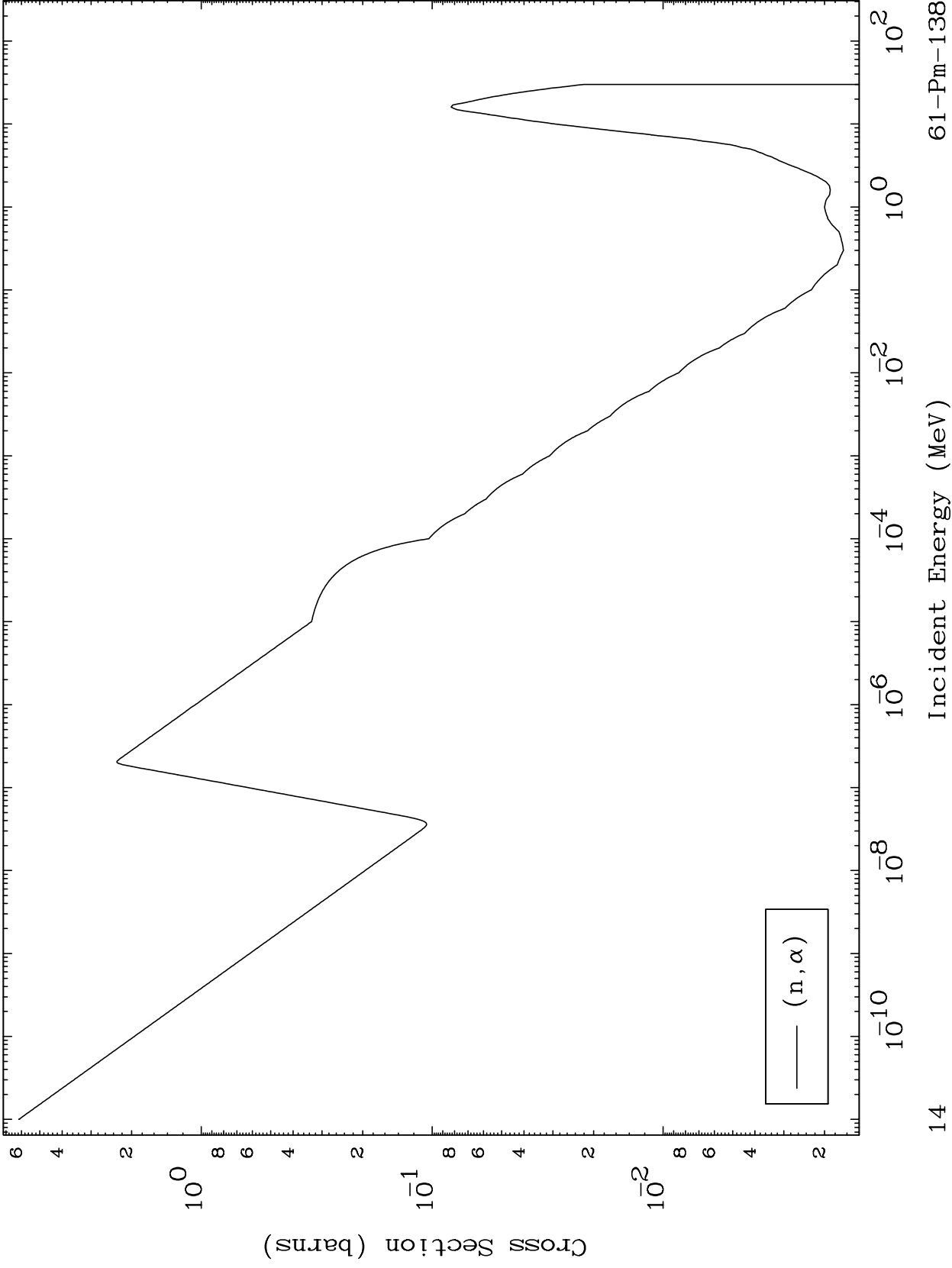
293 Kelvin Cross Sections

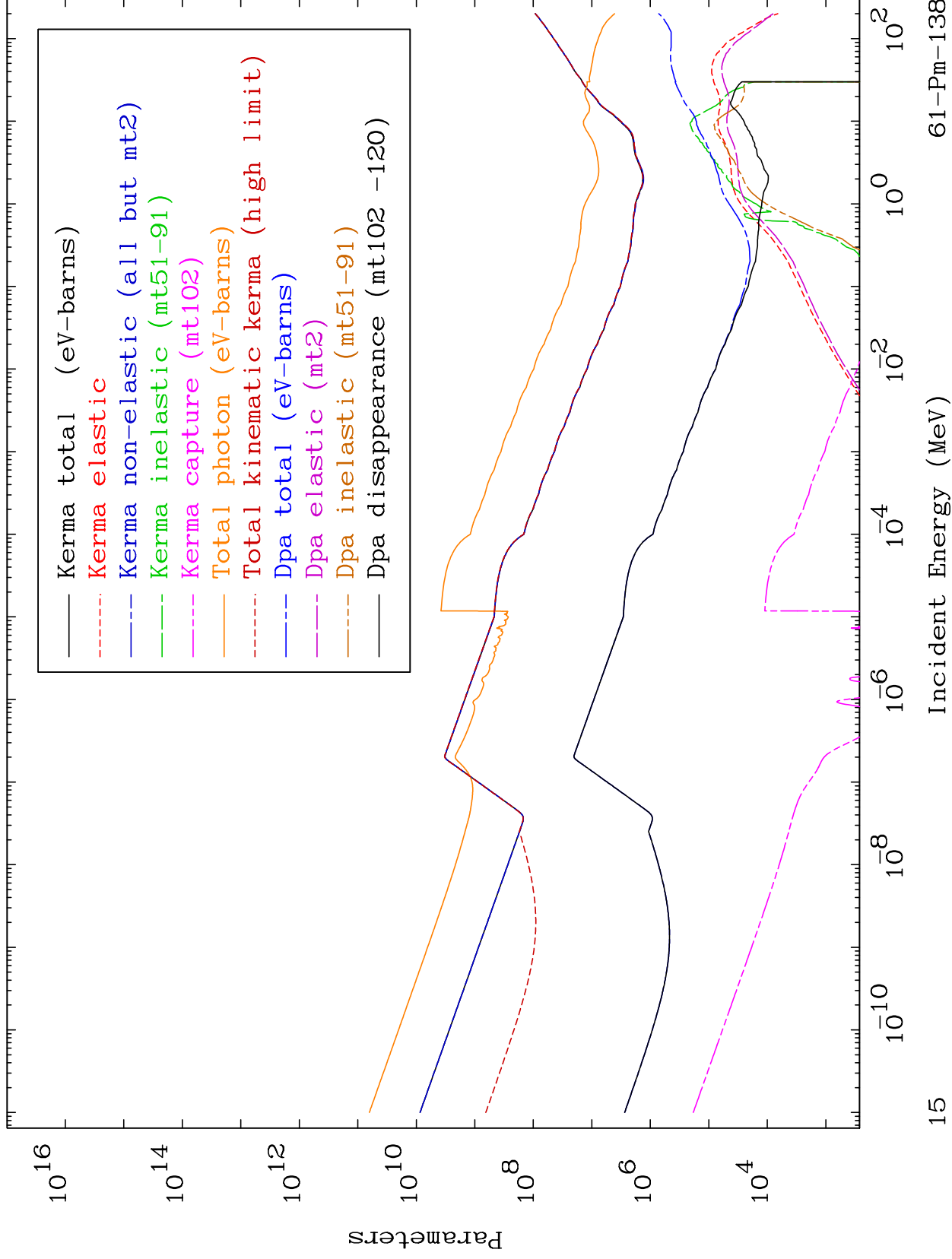


MAT 6122

(n, α) Levels
293 Kelvin Cross Sections

61-Pm-138

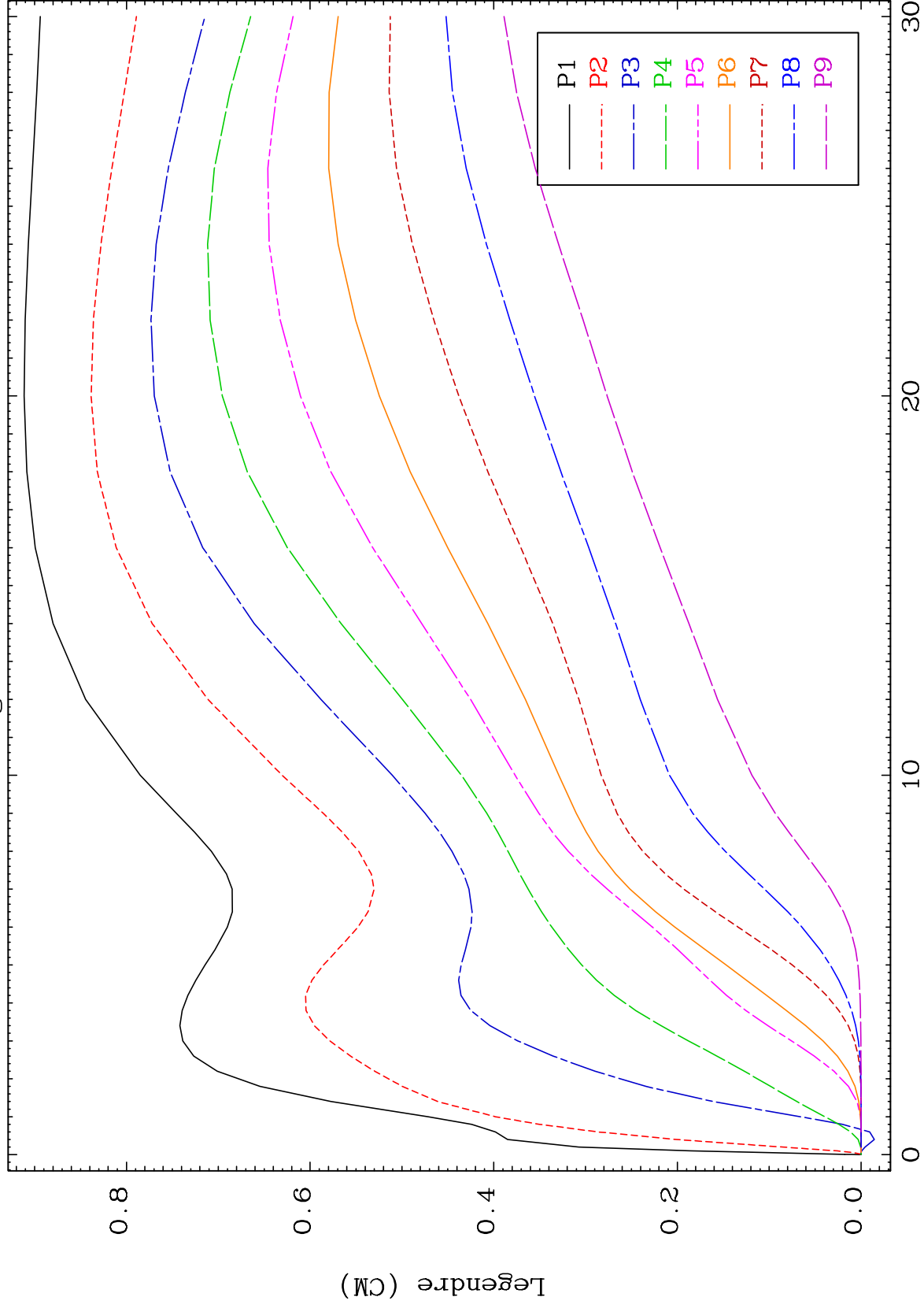




MAT 6122

Elastic Legendre Coefficients

61-Pm-138



16

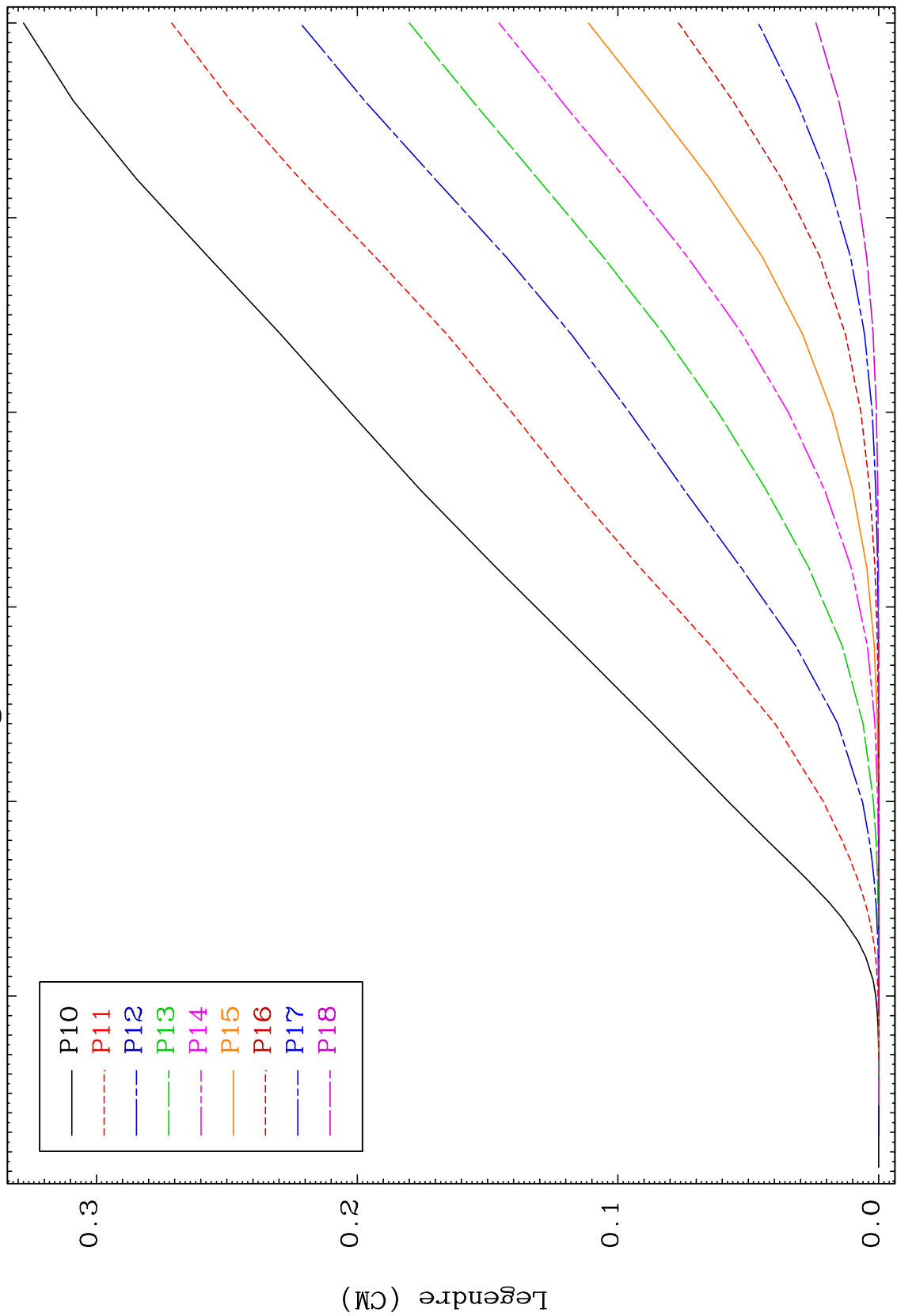
Incident Energy (MeV)

61-Pm-138

MAT 6122

Elastic Legendre Coefficients

61-Pm-138



17

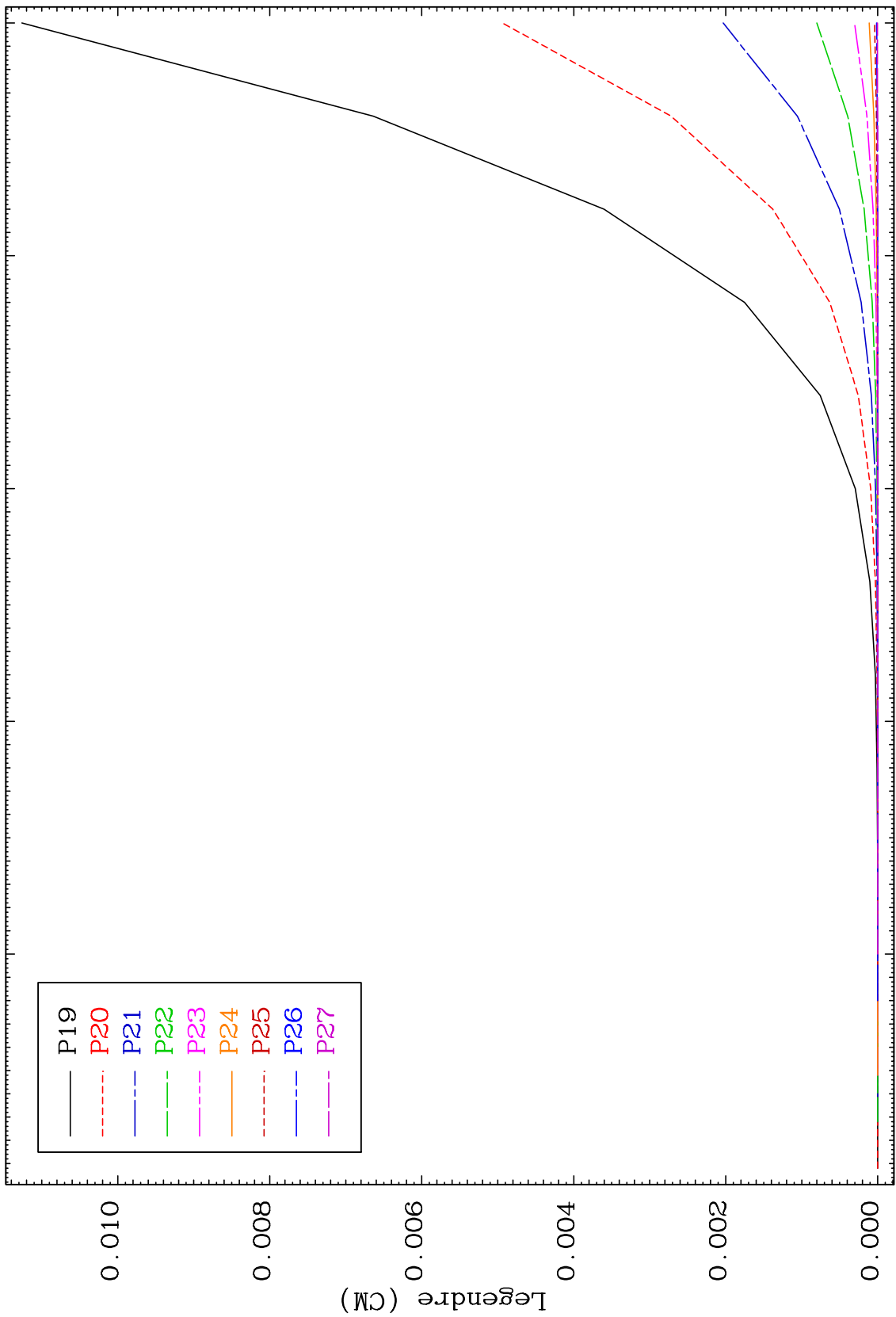
Incident Energy (MeV)

61-Pm-138

MAT 6122

Elastic Legendre Coefficients

61-Pm-138



18

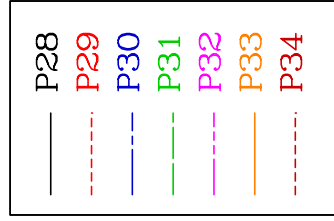
Incident Energy (MeV)

61-Pm-138

MAT 6122

Elastic
Legendre Coefficients

61-Pm-138



$\times 10^{-6}$

Legendre (CM)

1.0

0.8

0.6

0.4

0.2

0.0

15

20

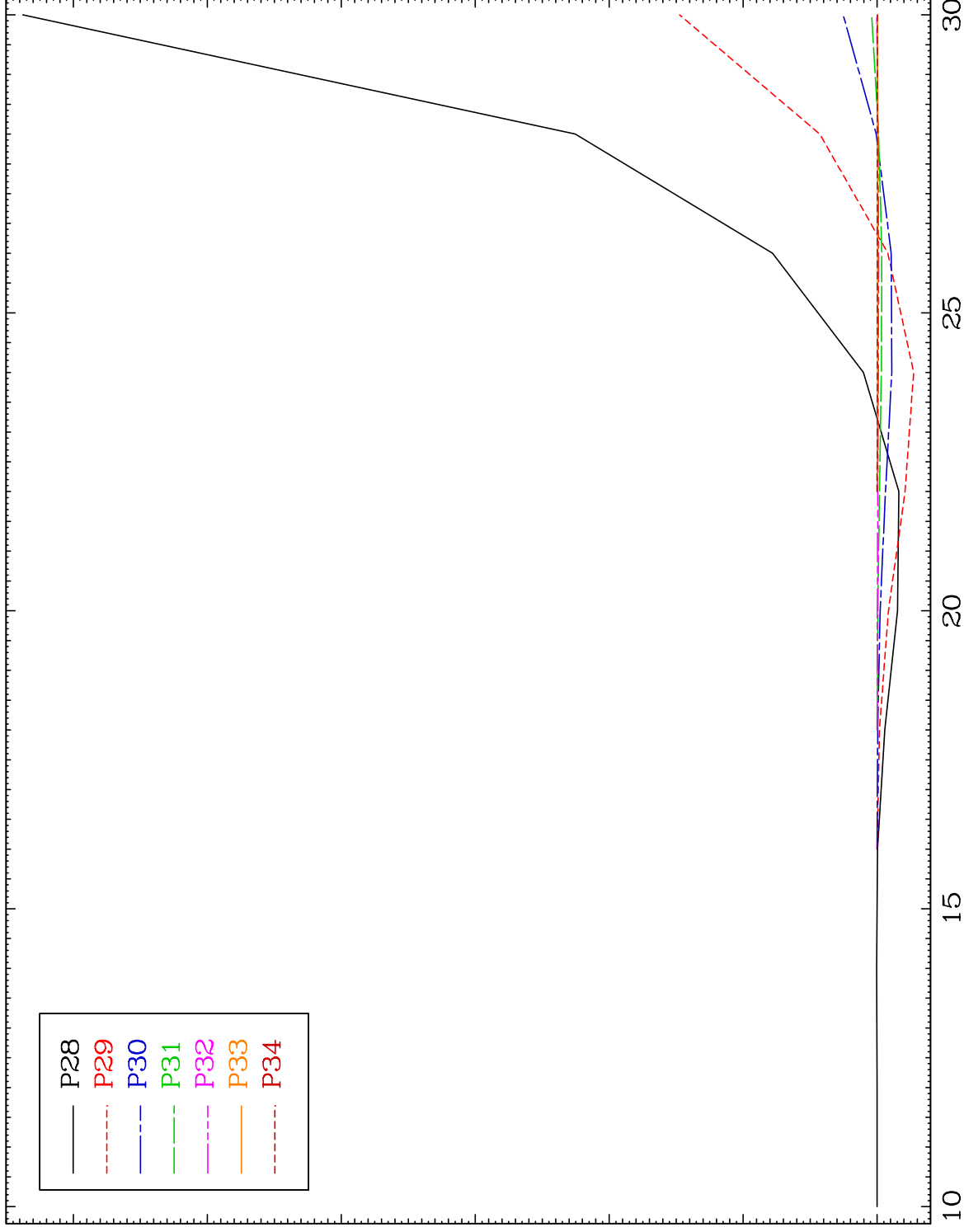
25

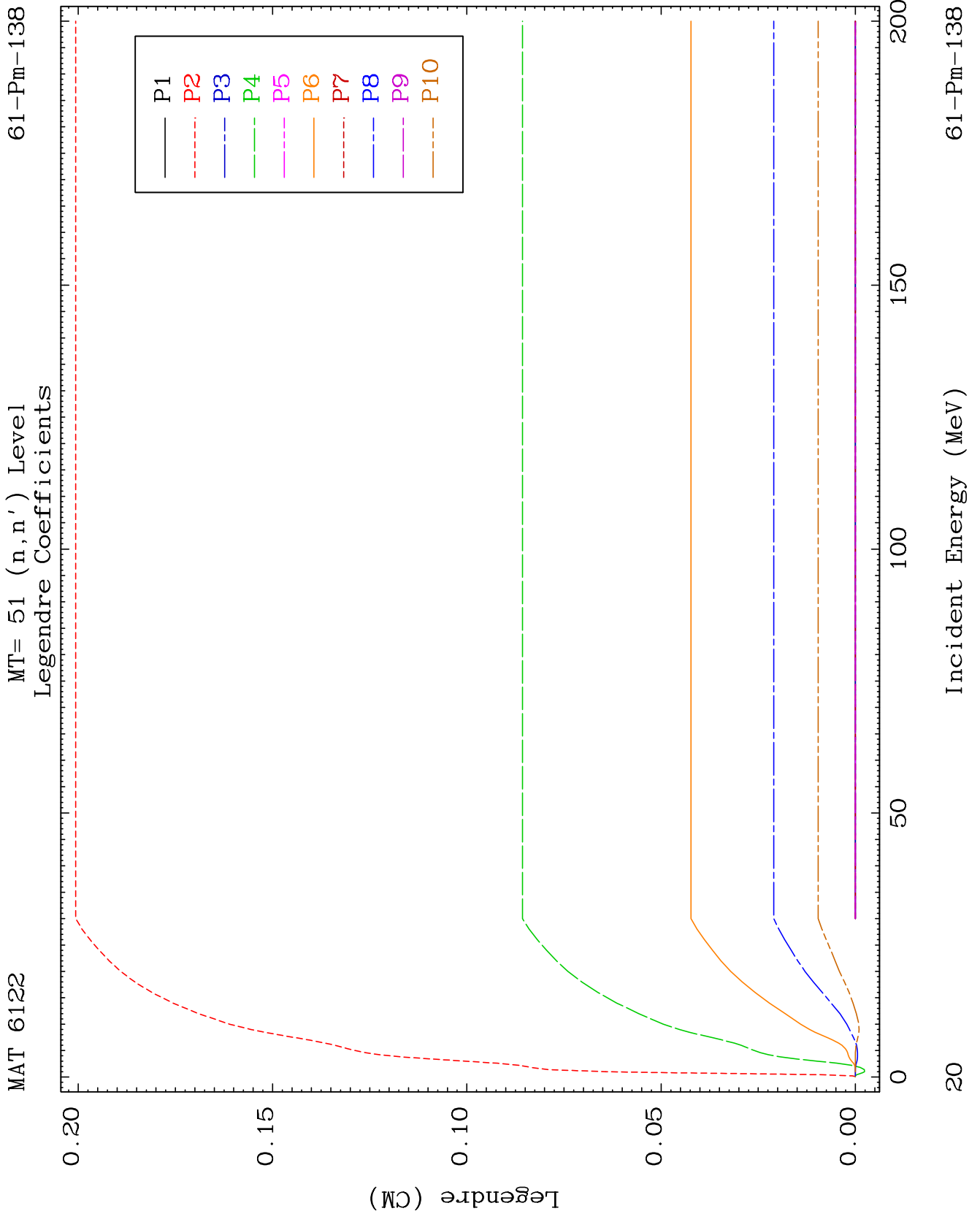
30

19

Incident Energy (MeV)

61-Pm-138

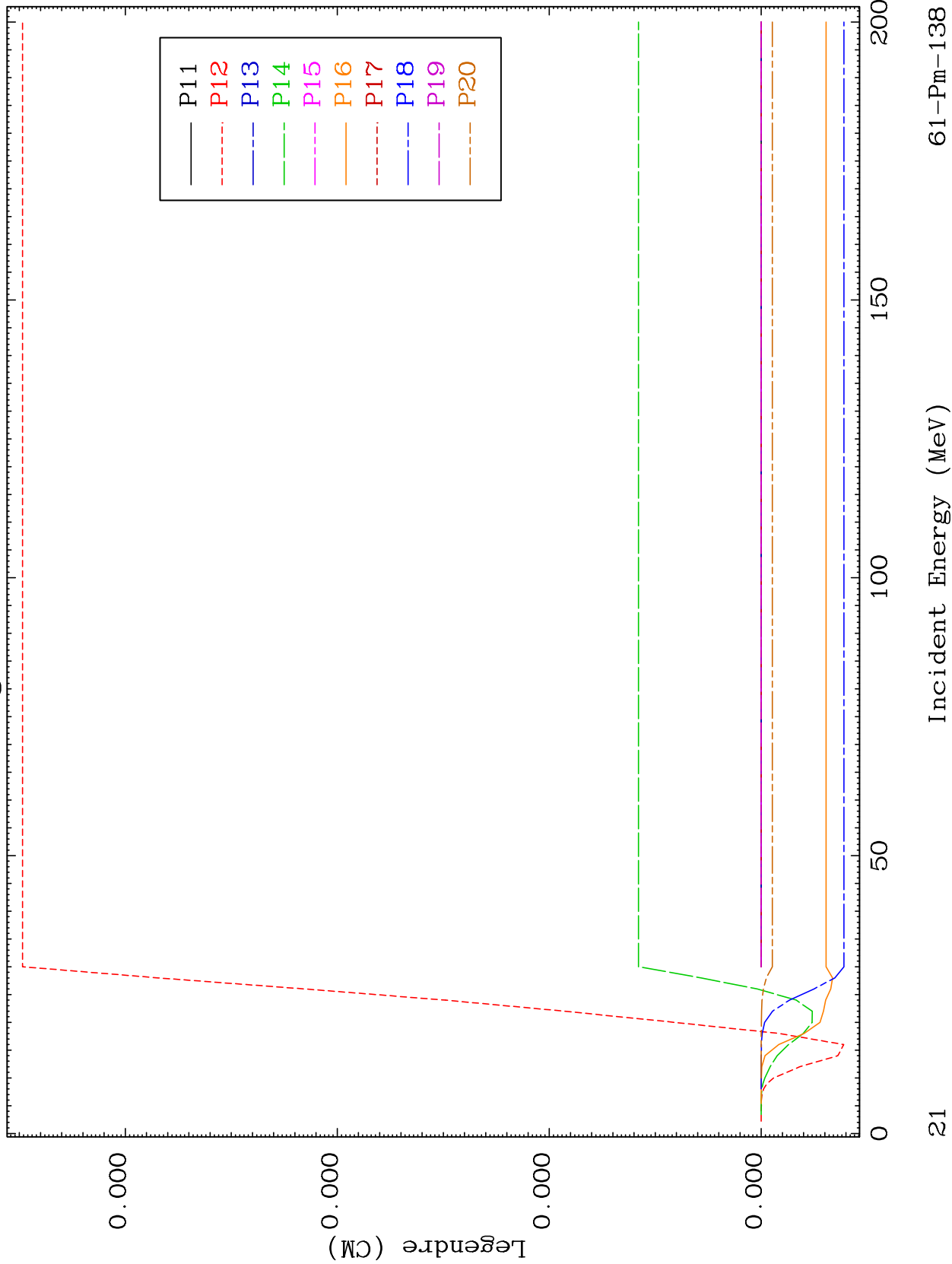




MAT 6122

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

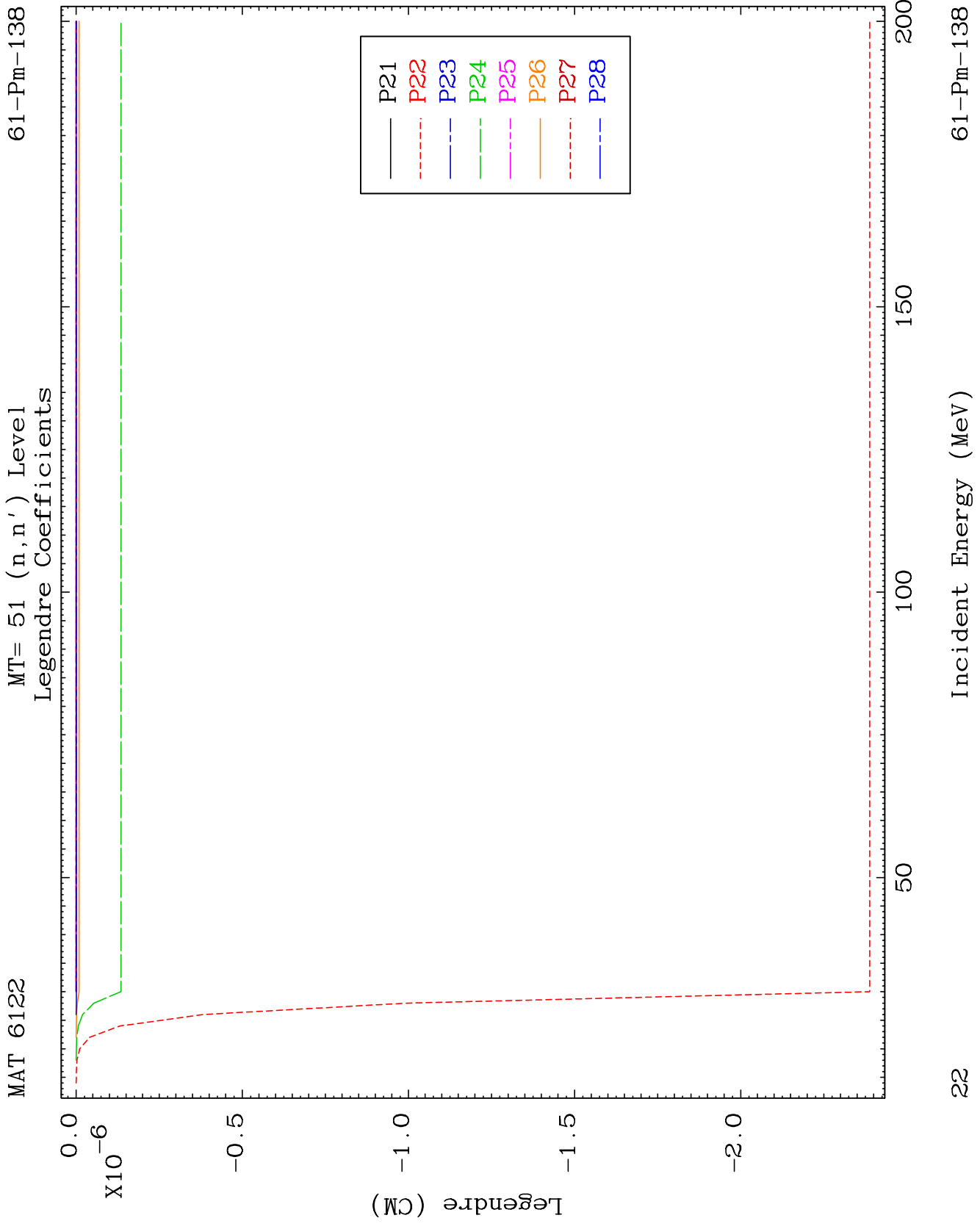
61-Pm-138



21

Incident Energy (MeV)

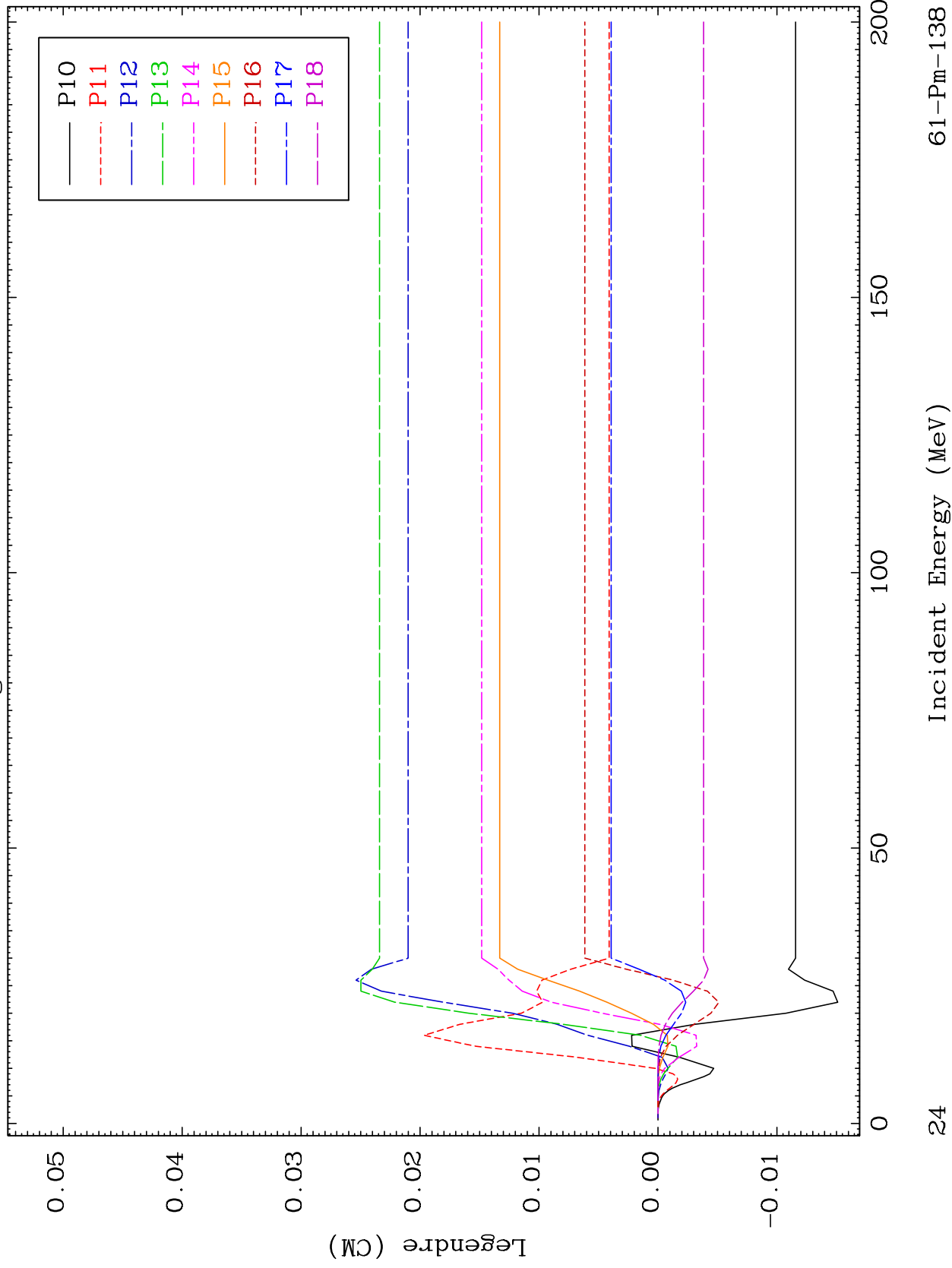
61-Pm-138



MAT 6122

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

61-Pm-138



61-Pm-138

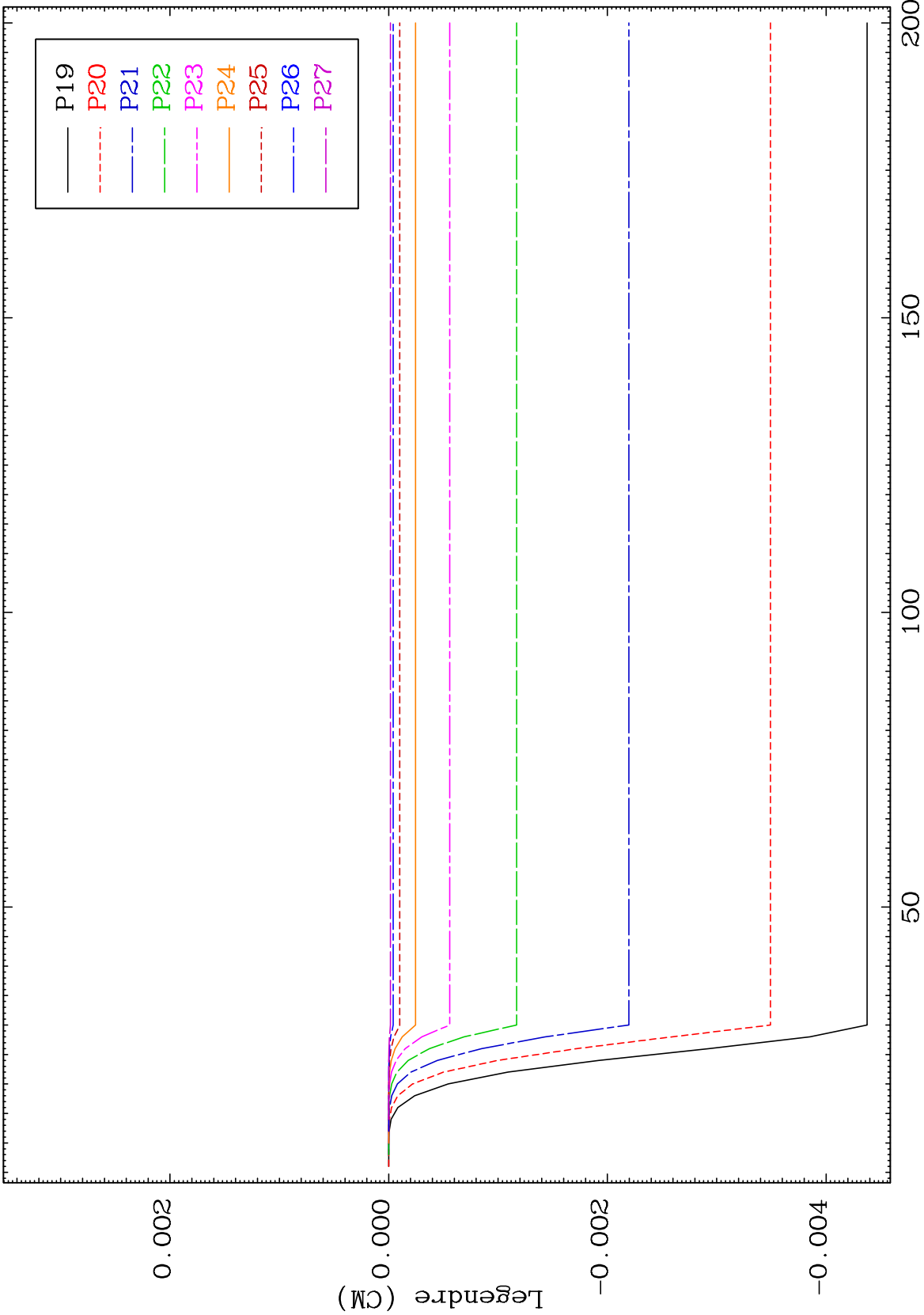
Incident Energy (MeV)

24

MAT 6122

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

61-Pm-138



25

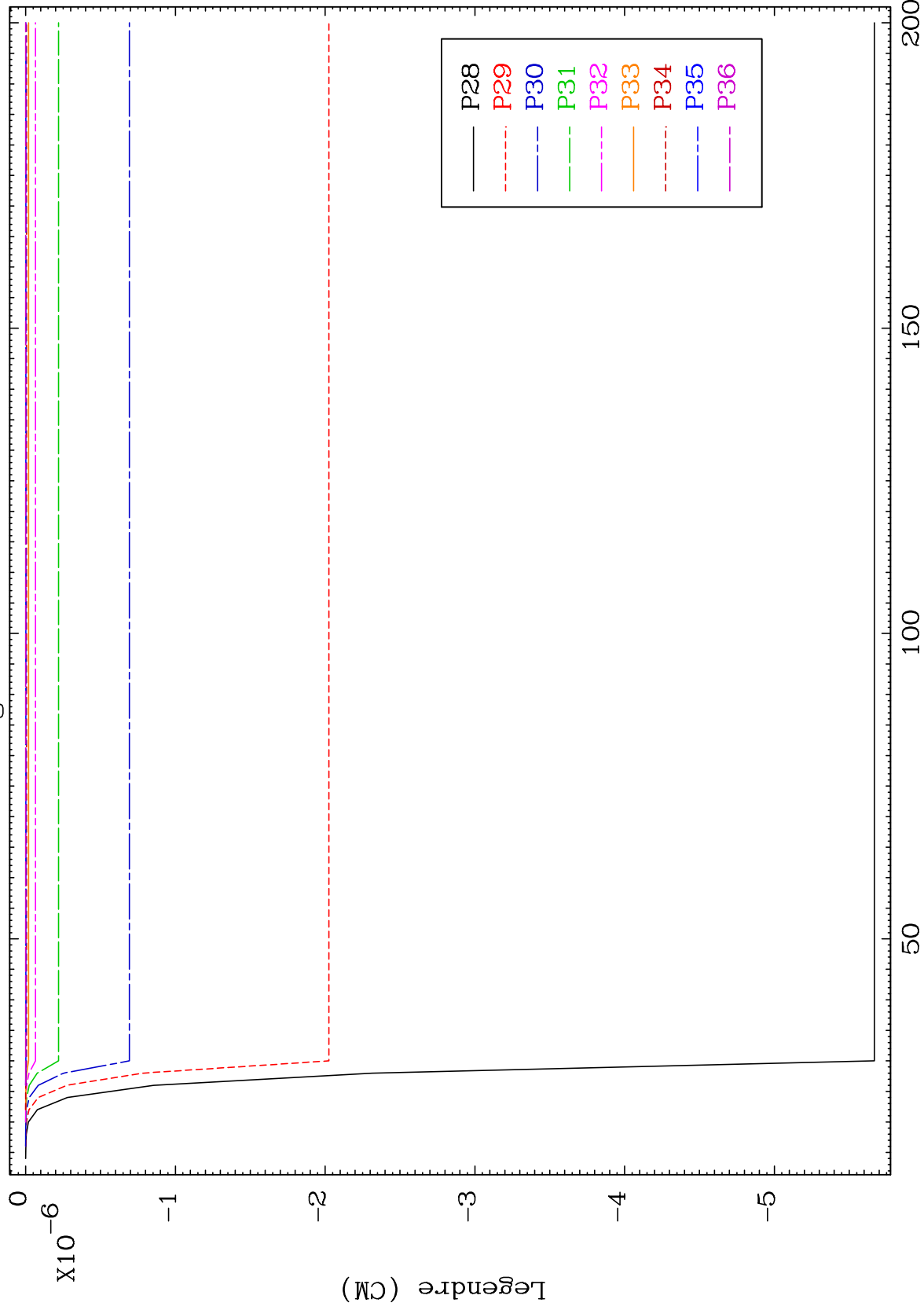
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



26

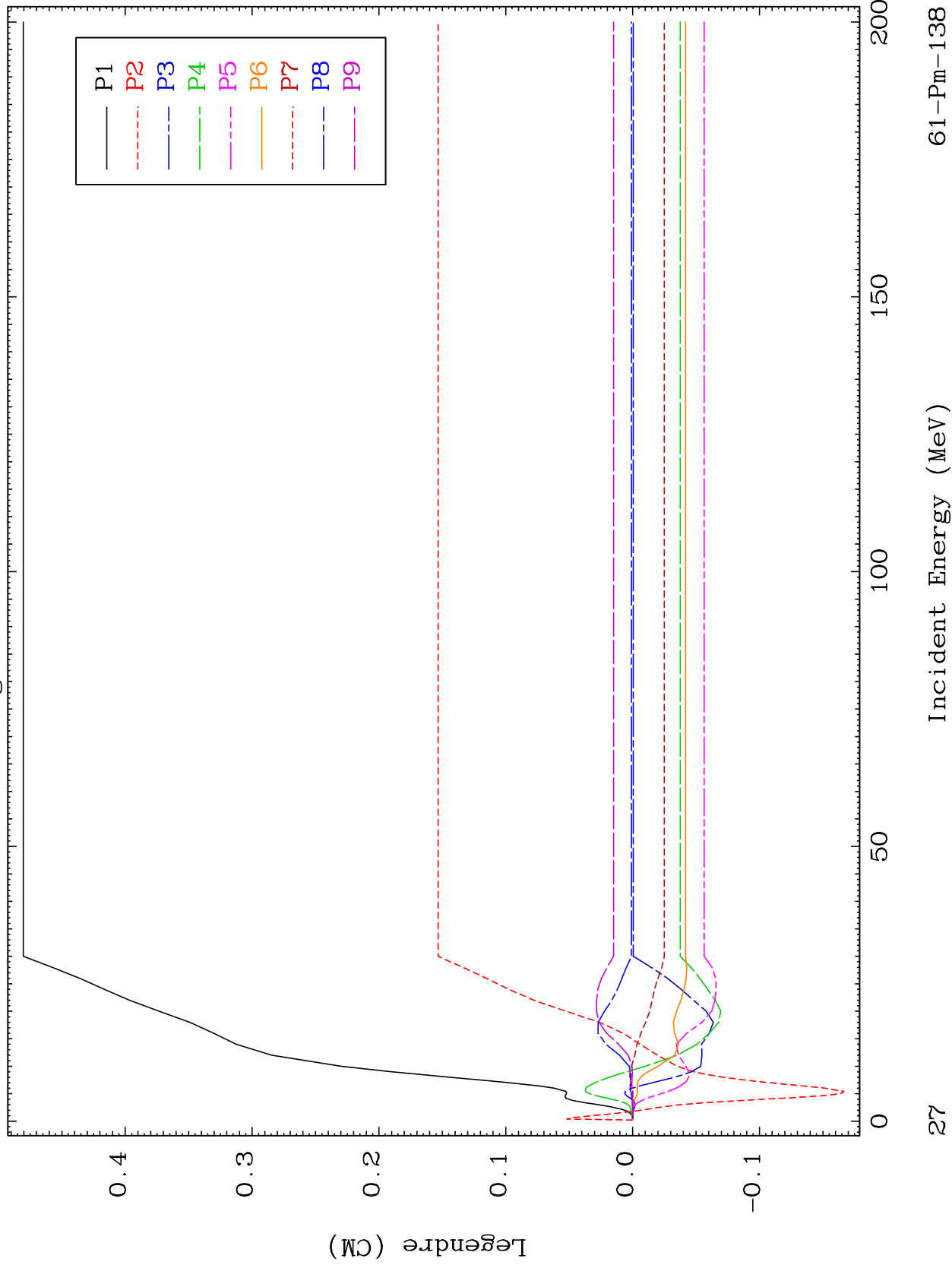
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



61-Pm-138

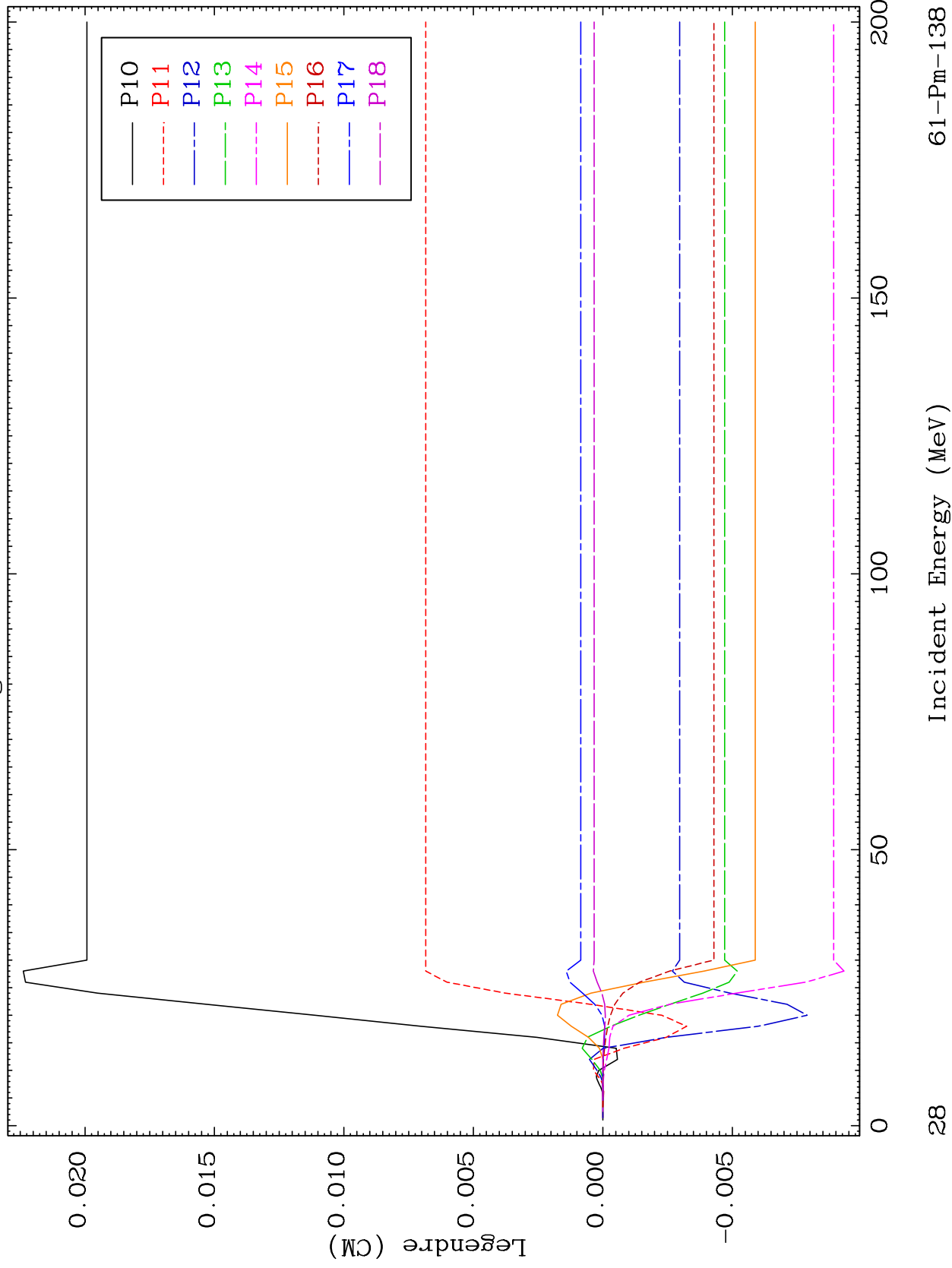
Incident Energy (MeV)

27

MAT 6122

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

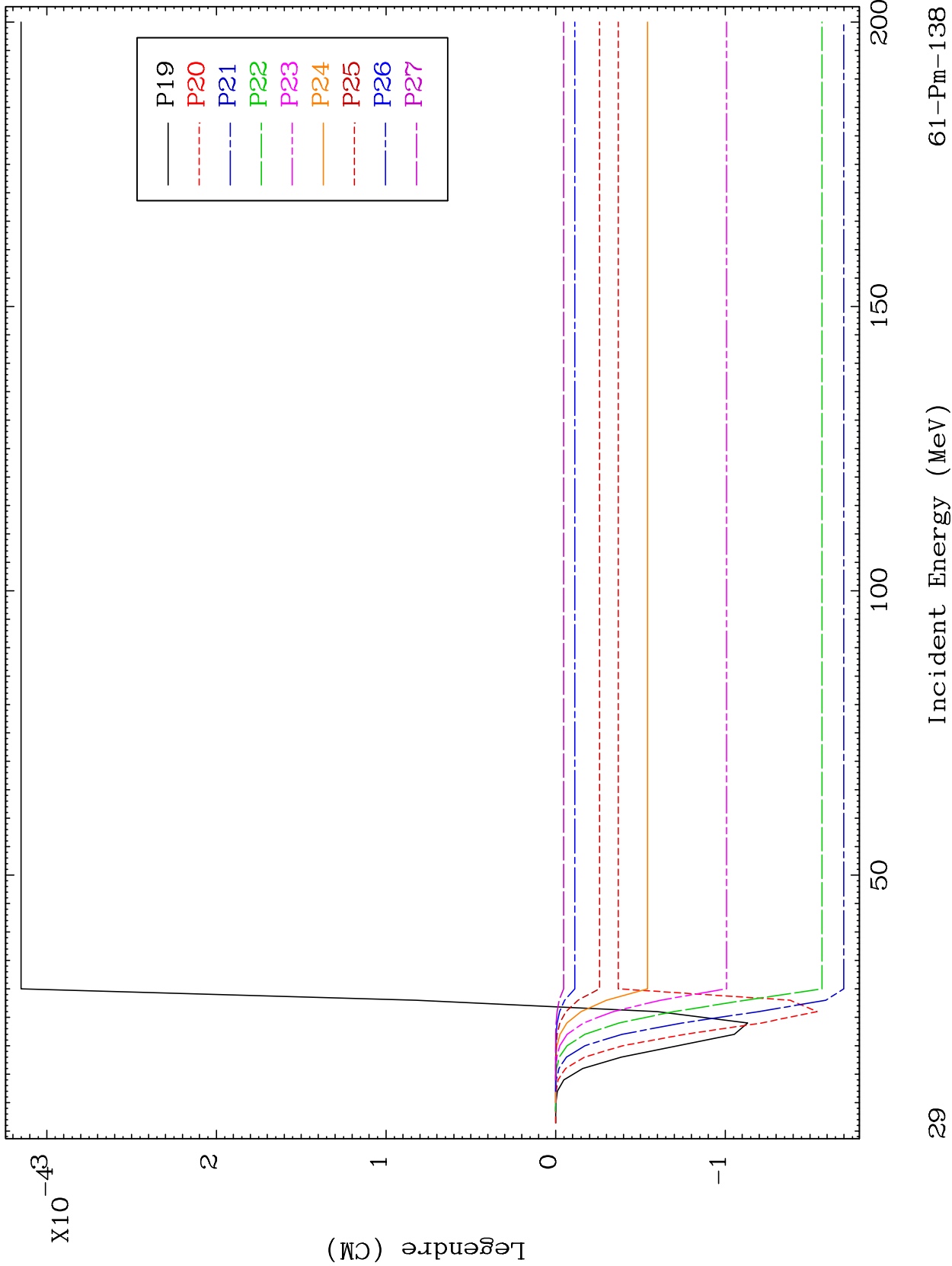
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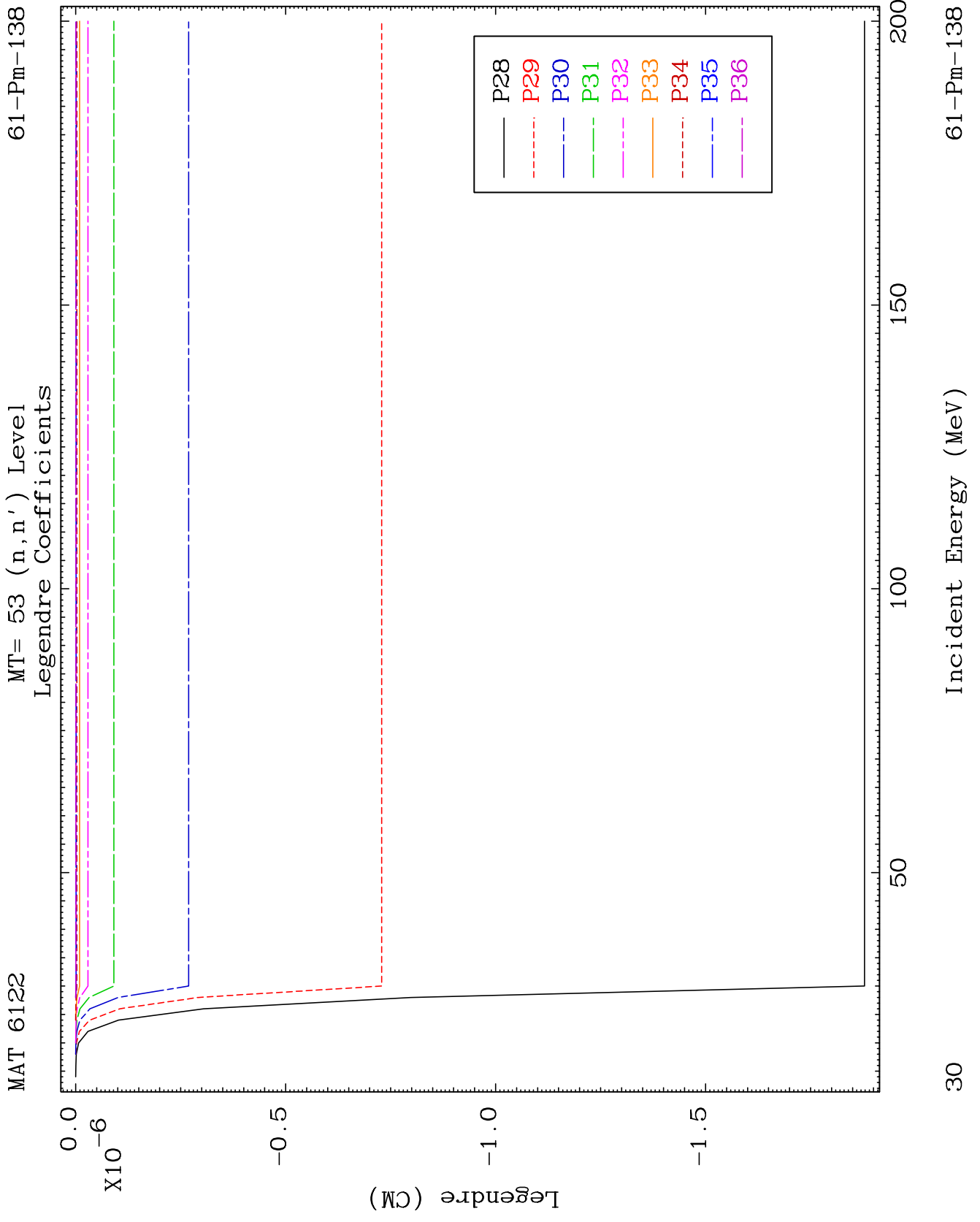


28

Incident Energy (MeV)

61-Pm-138

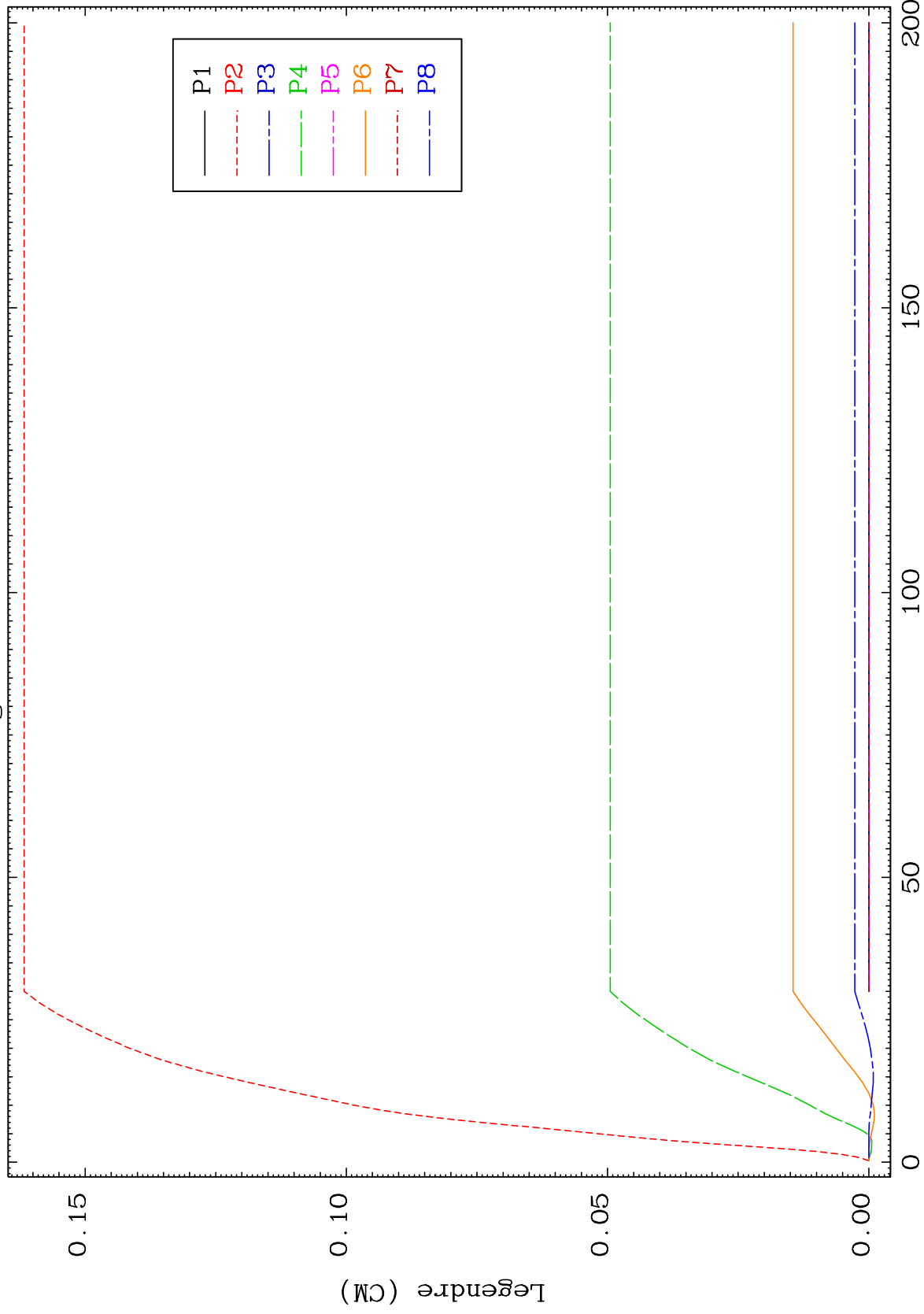




MAT 6122

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

61-Pm-138



31

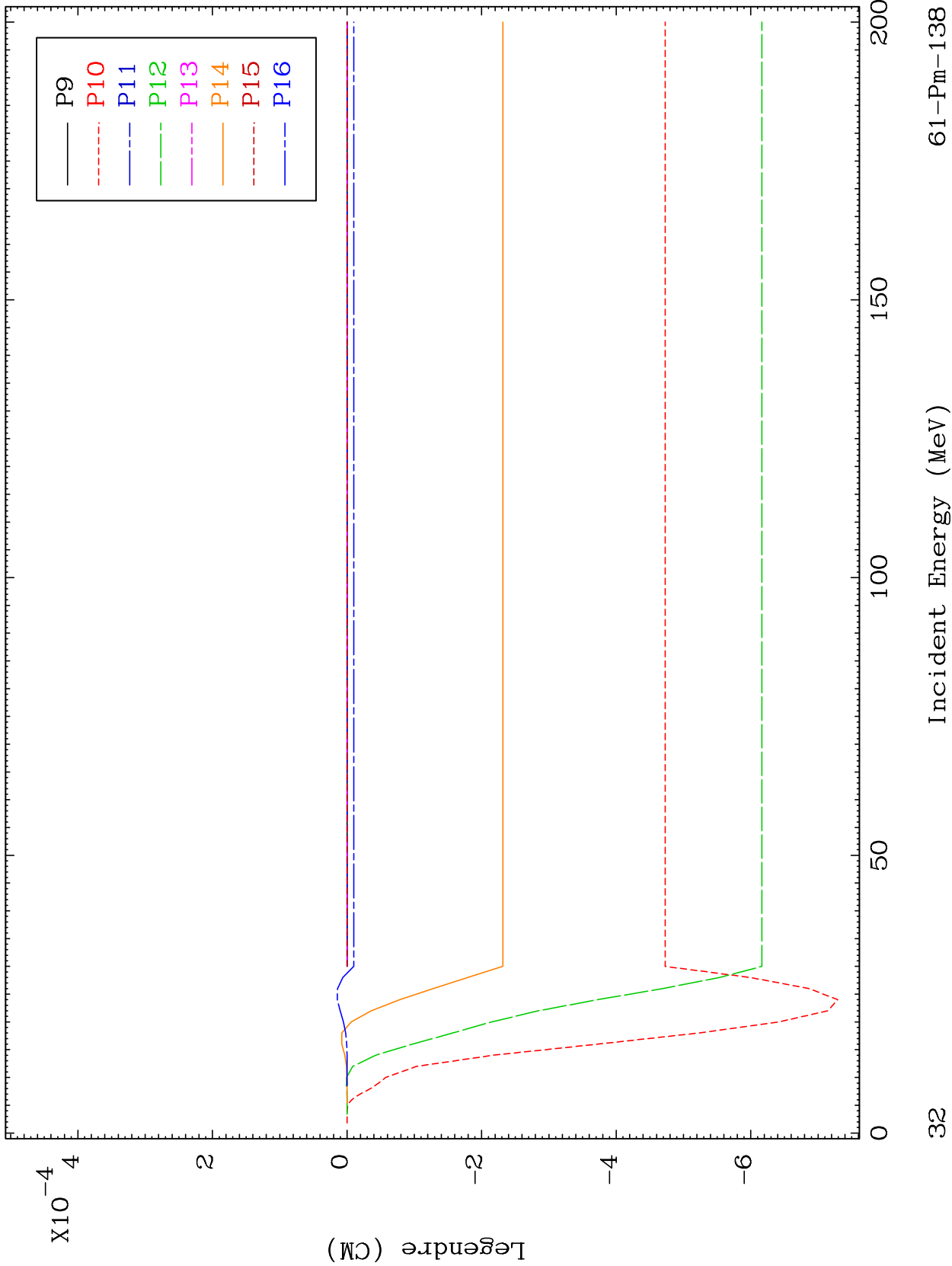
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



32

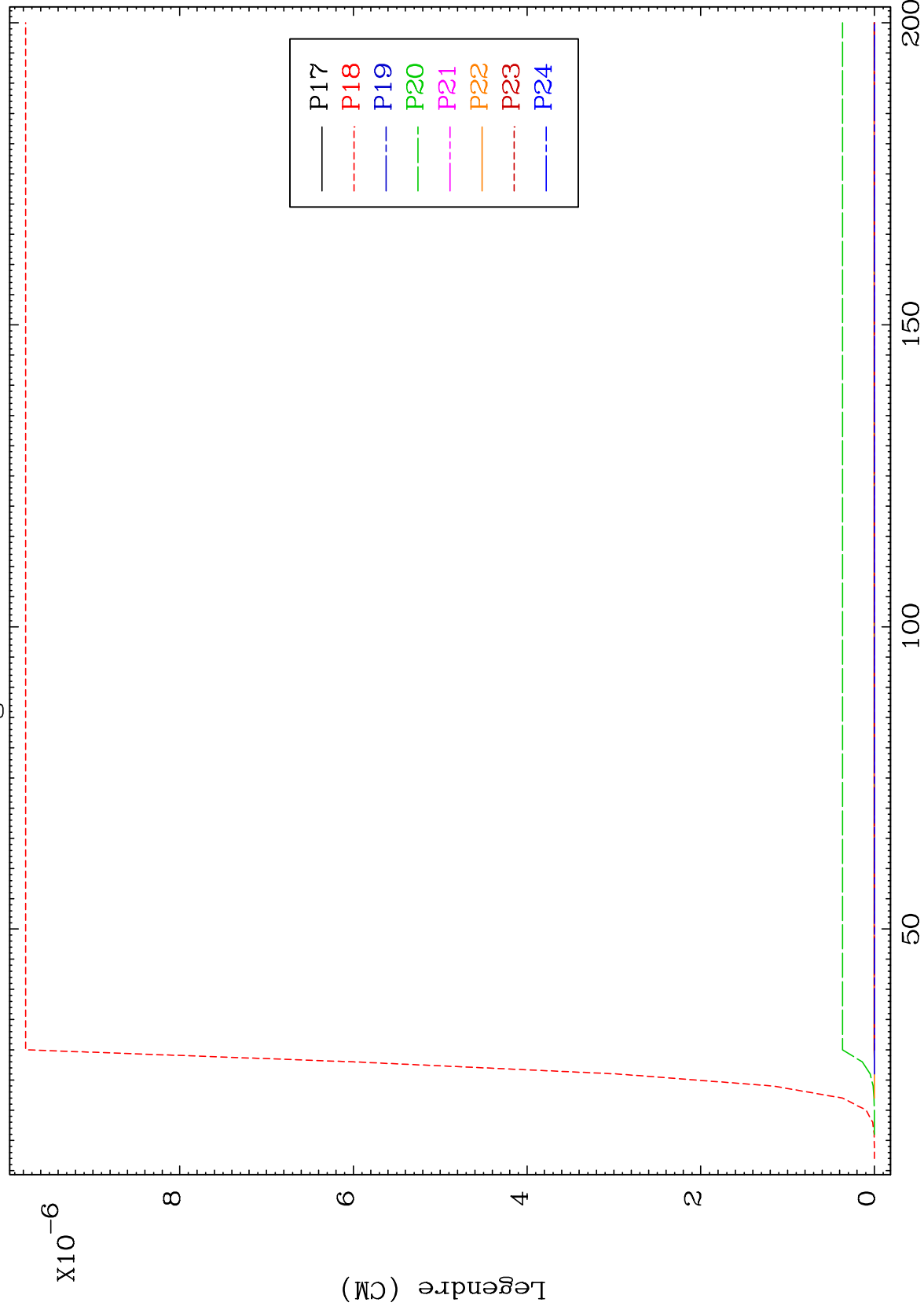
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



33

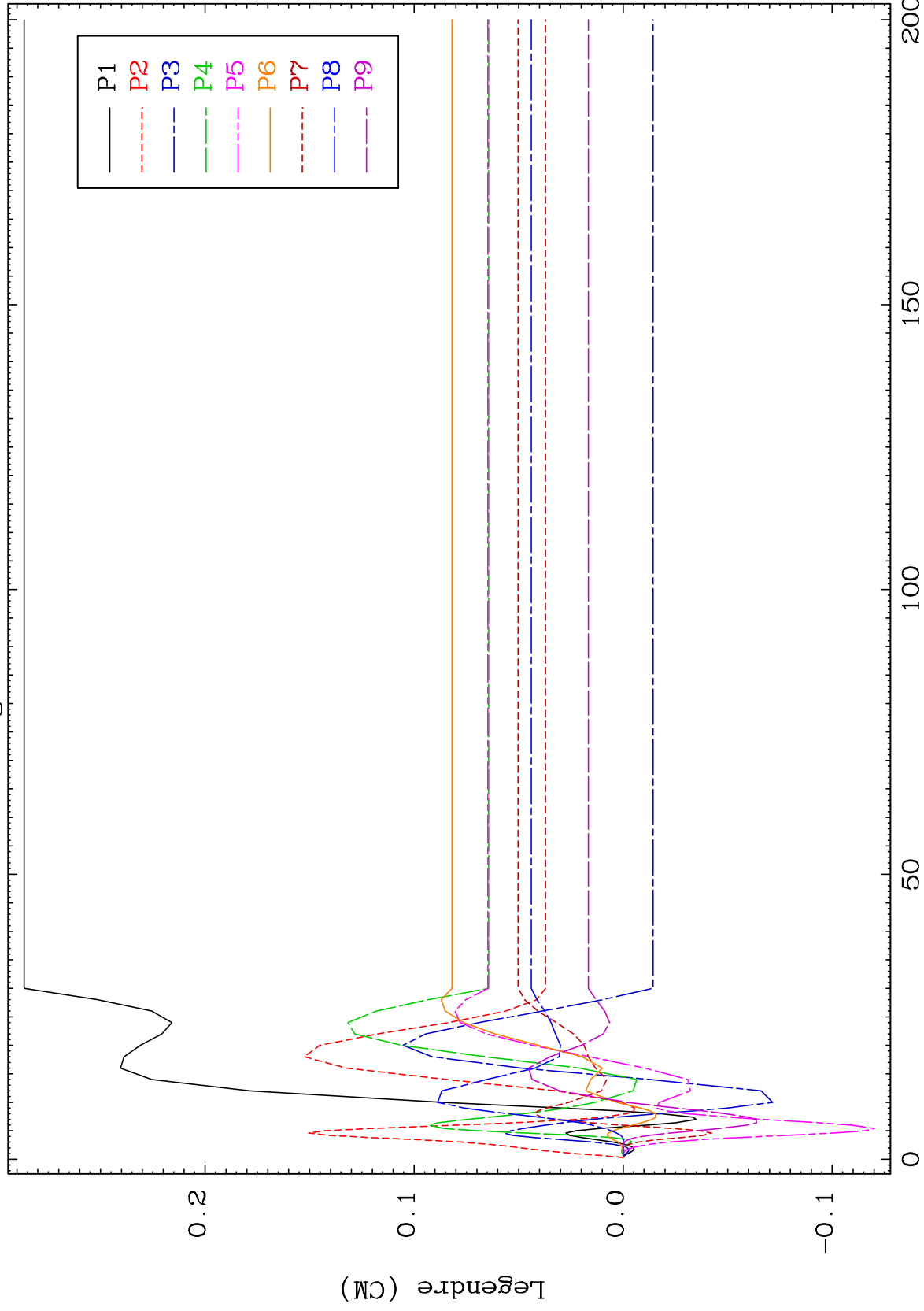
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



34

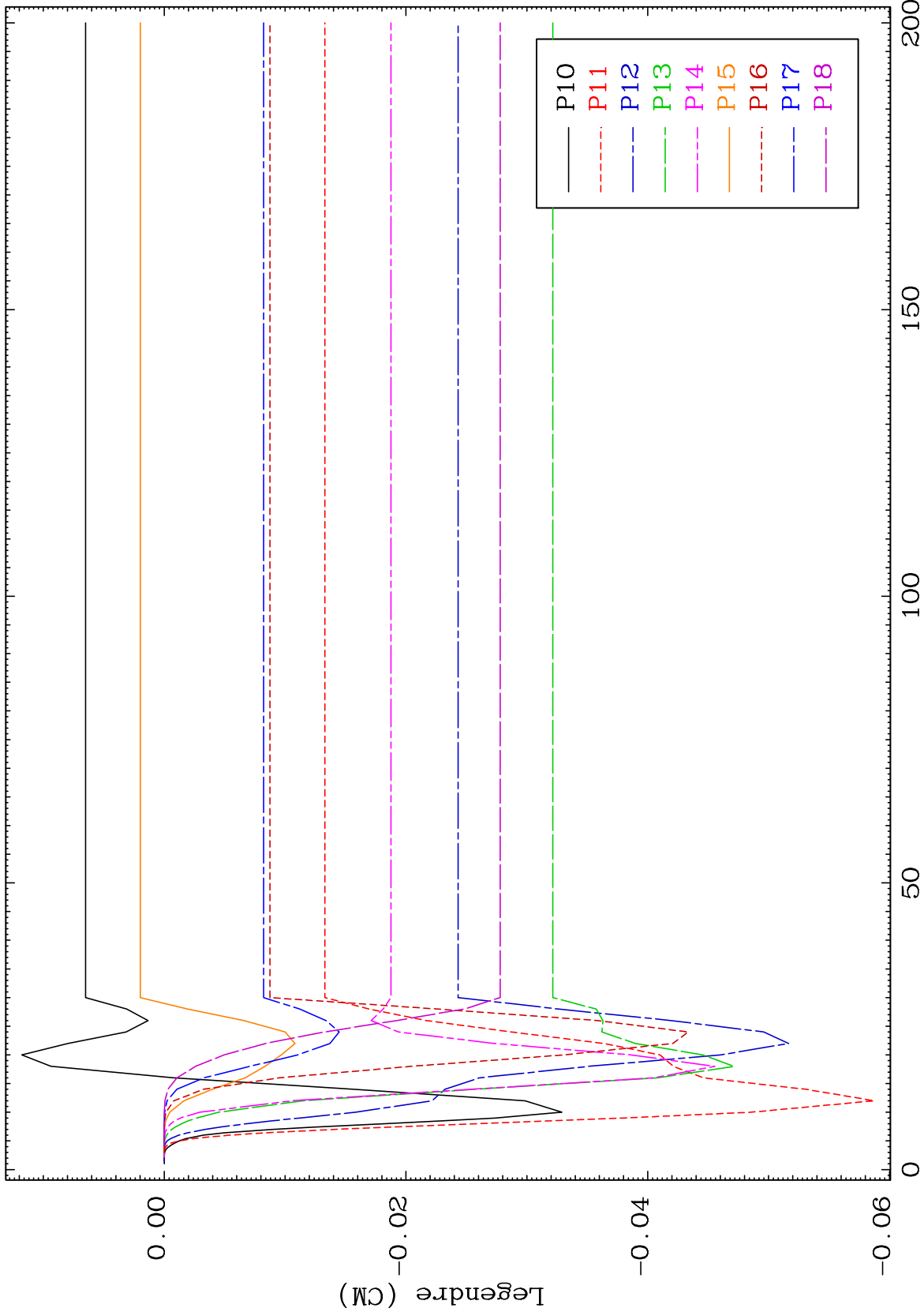
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



35

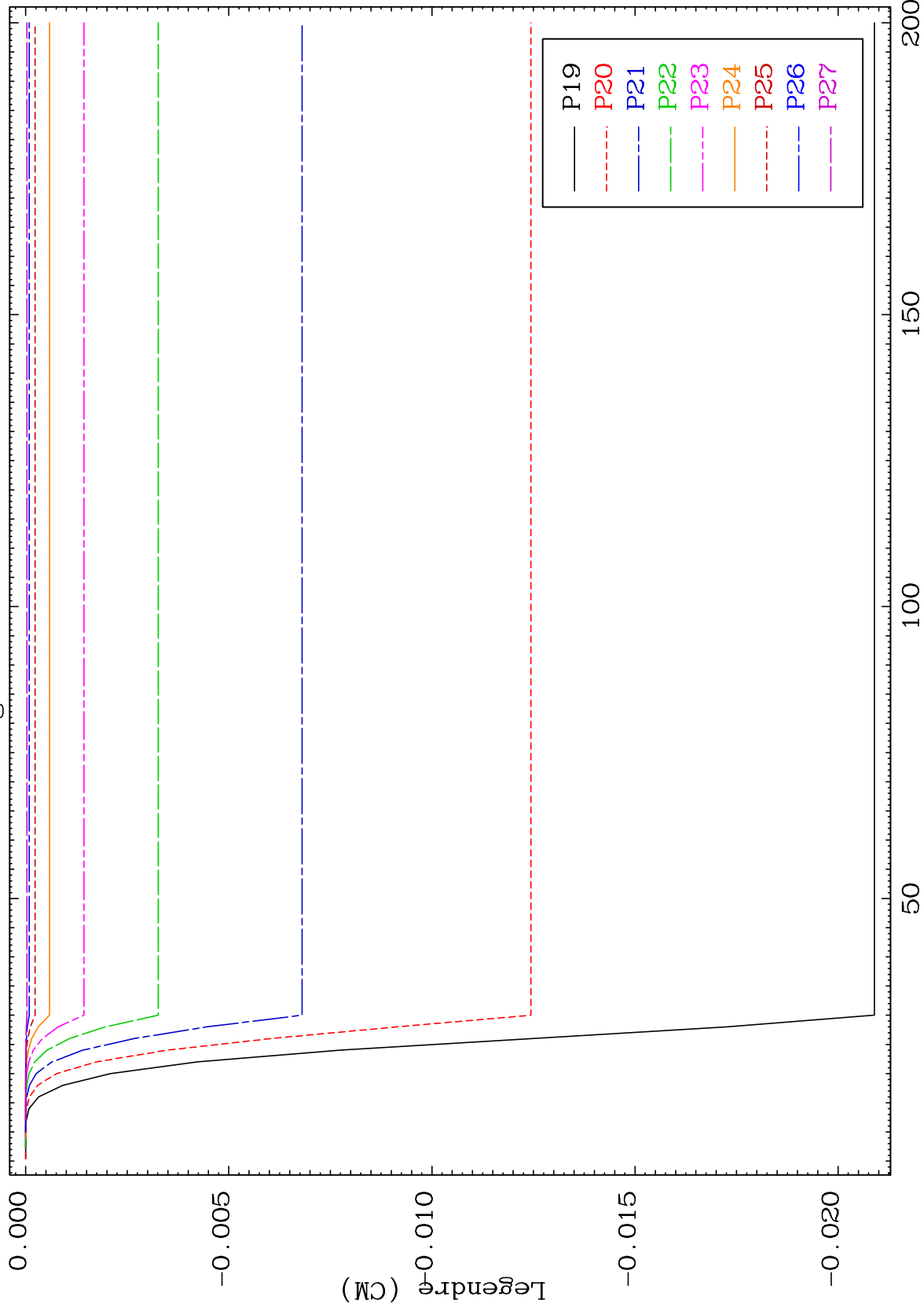
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

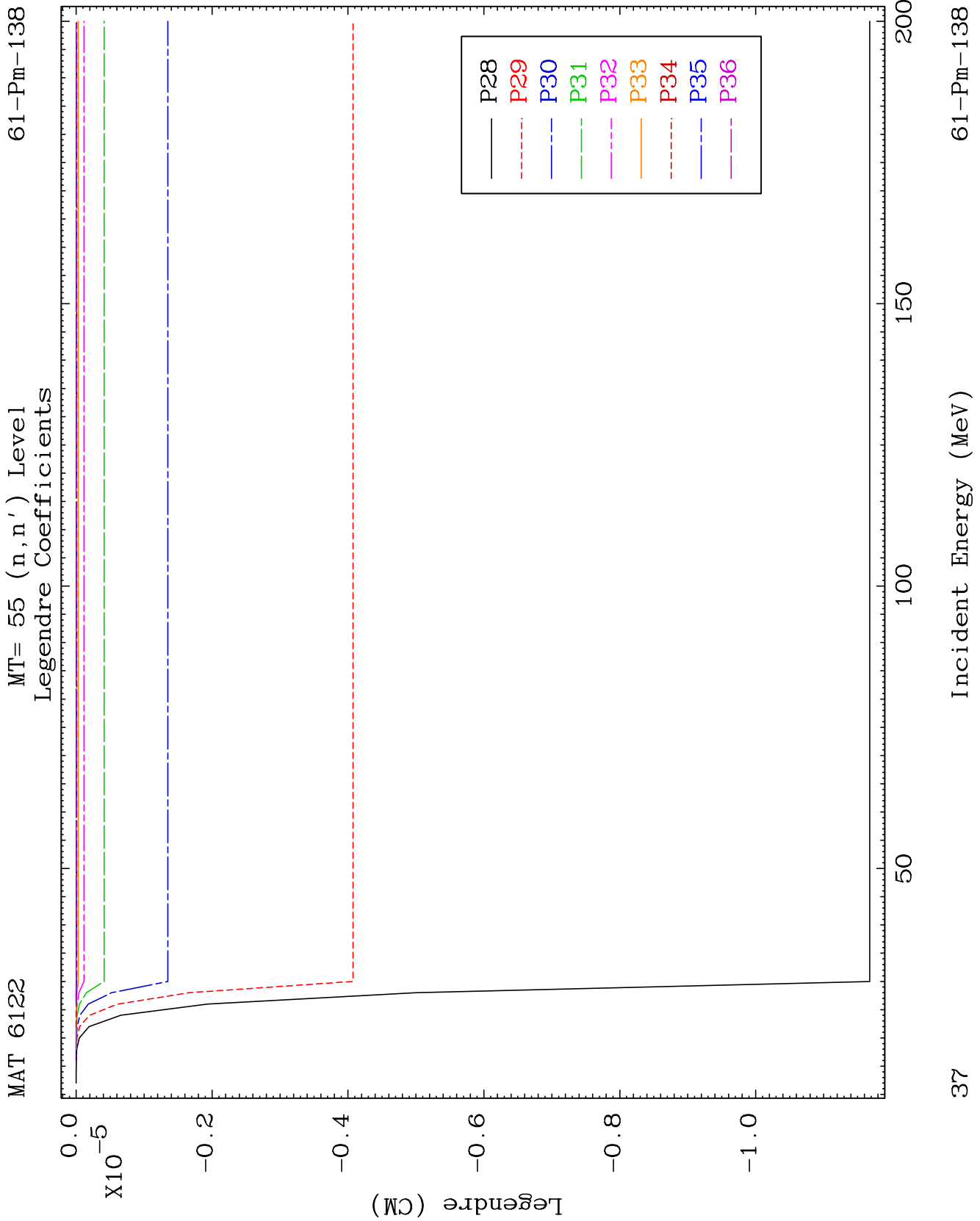
61-Pm-138



36

Incident Energy (MeV)

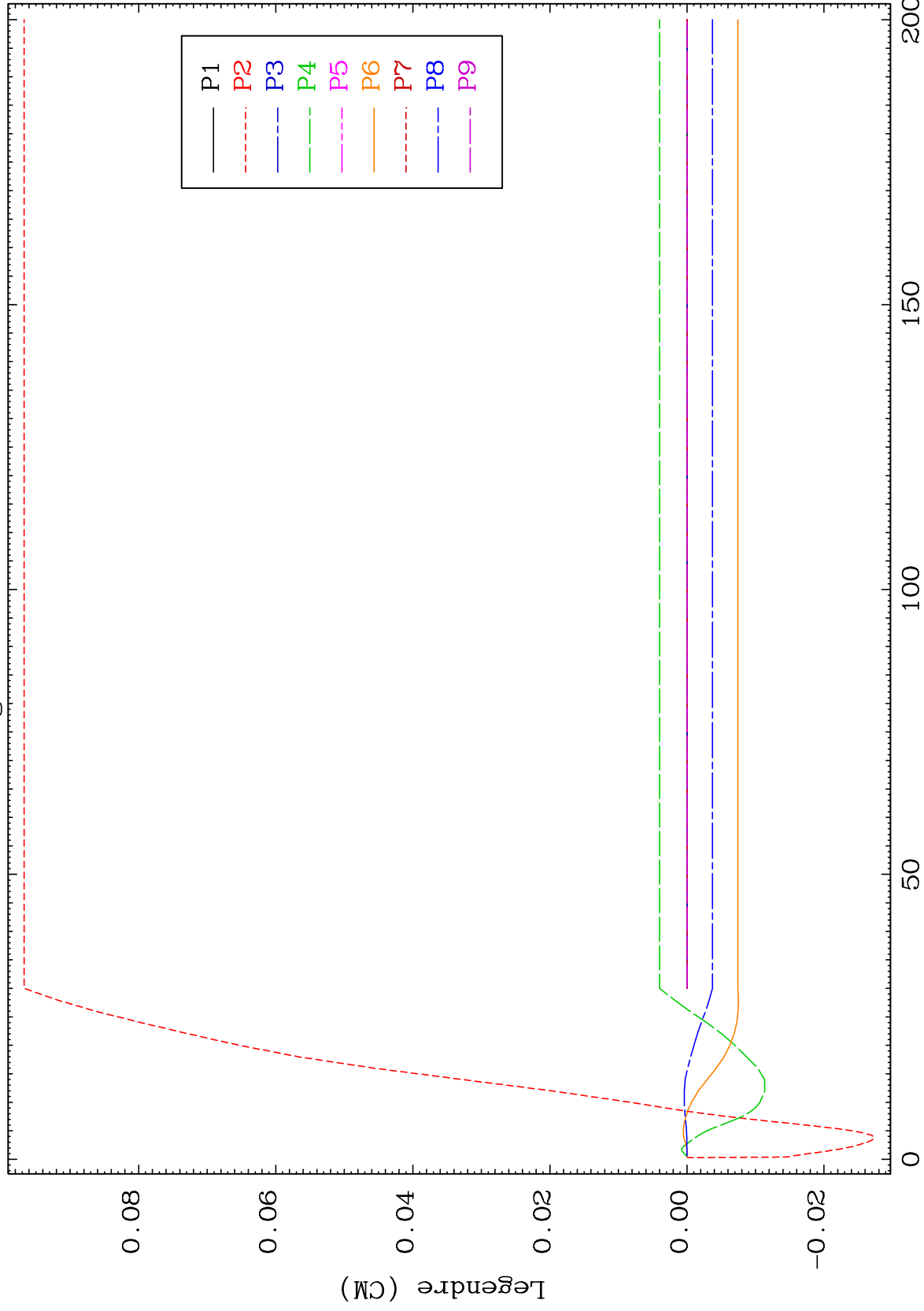
61-Pm-138



MAT 61222

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

61-Pm-138



61-Pm-138

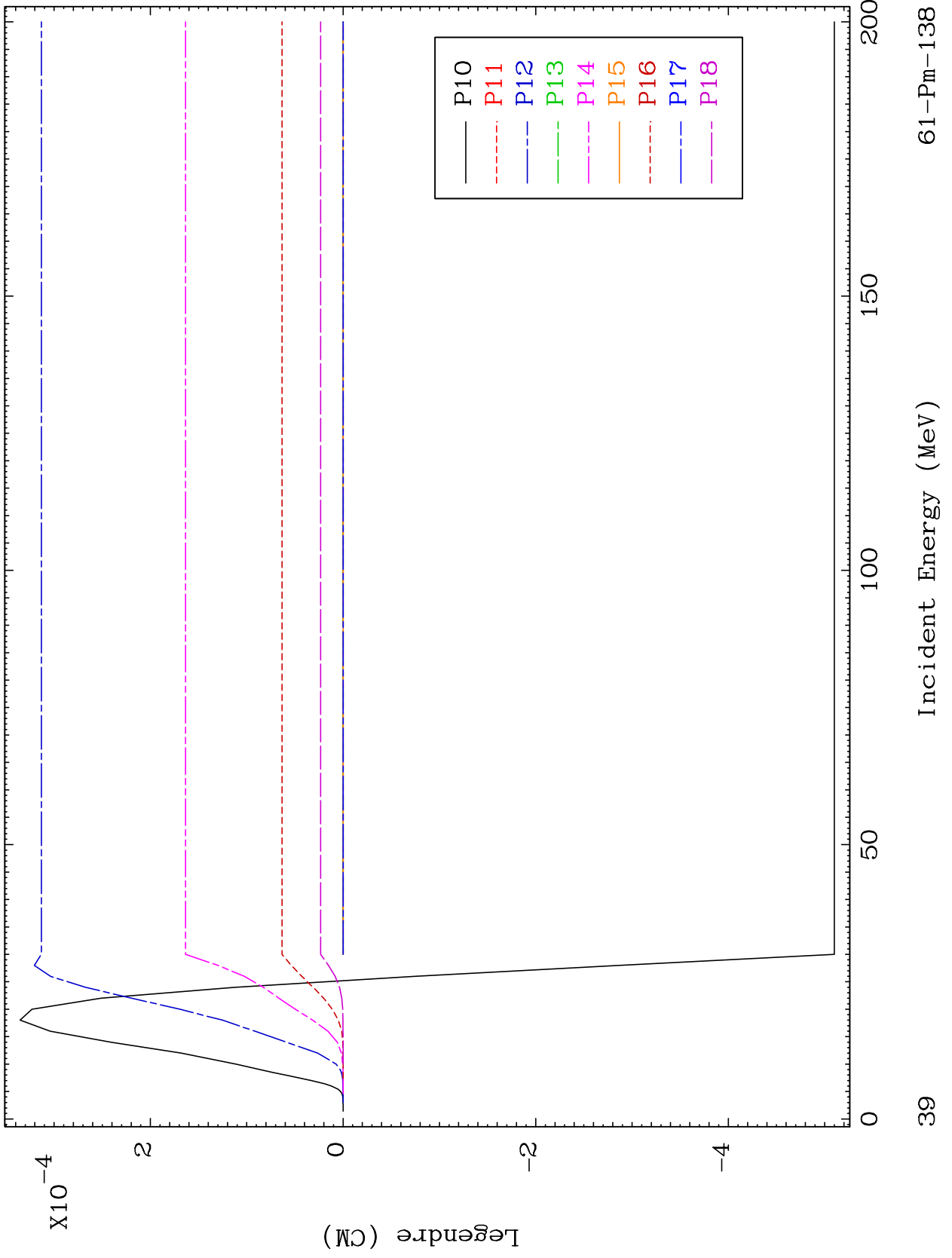
Incident Energy (MeV)

38

MAT 61222

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

61-Pm-138



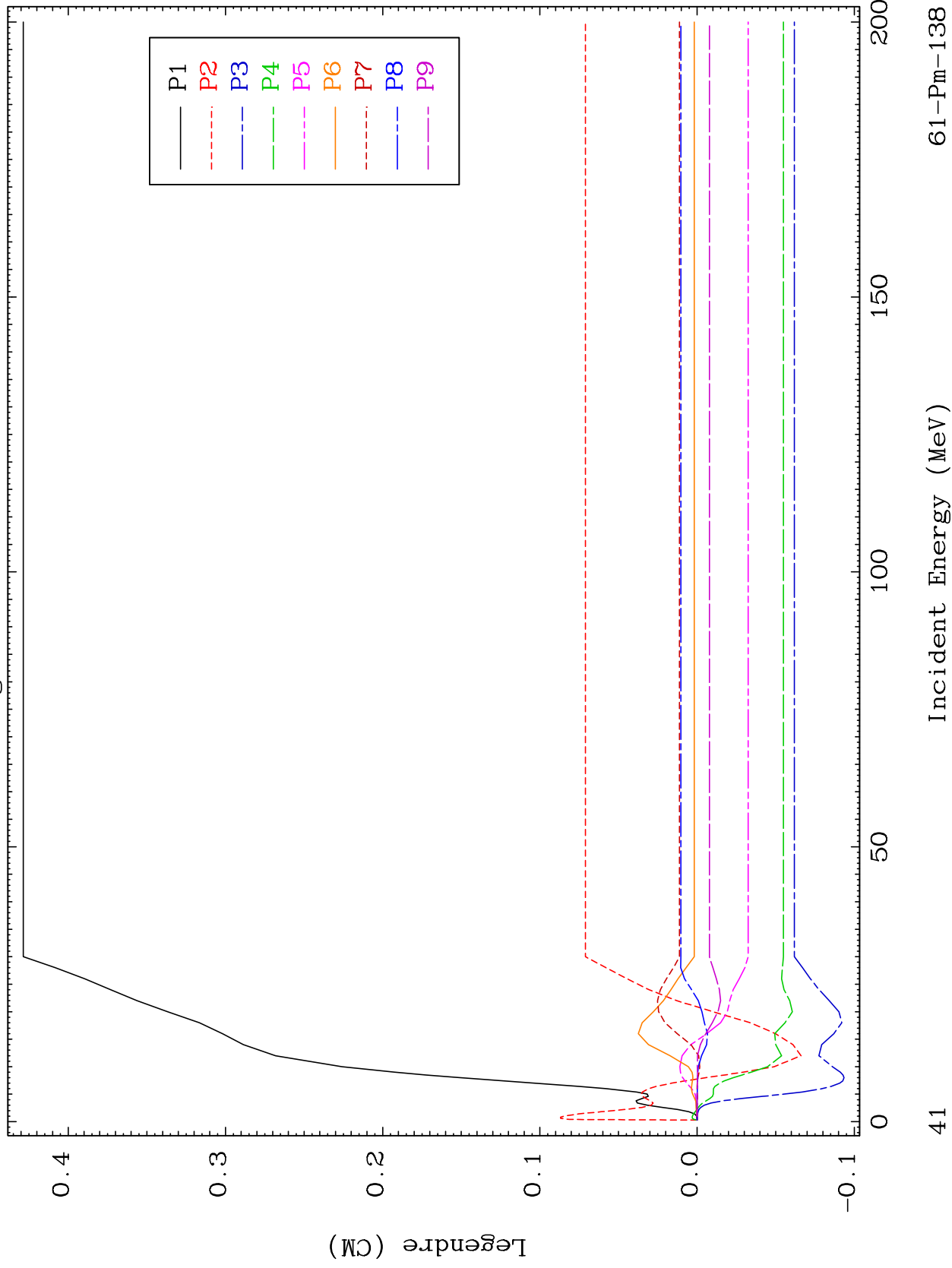
39

61-Pm-138

MAT 6122

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

61-Pm-138

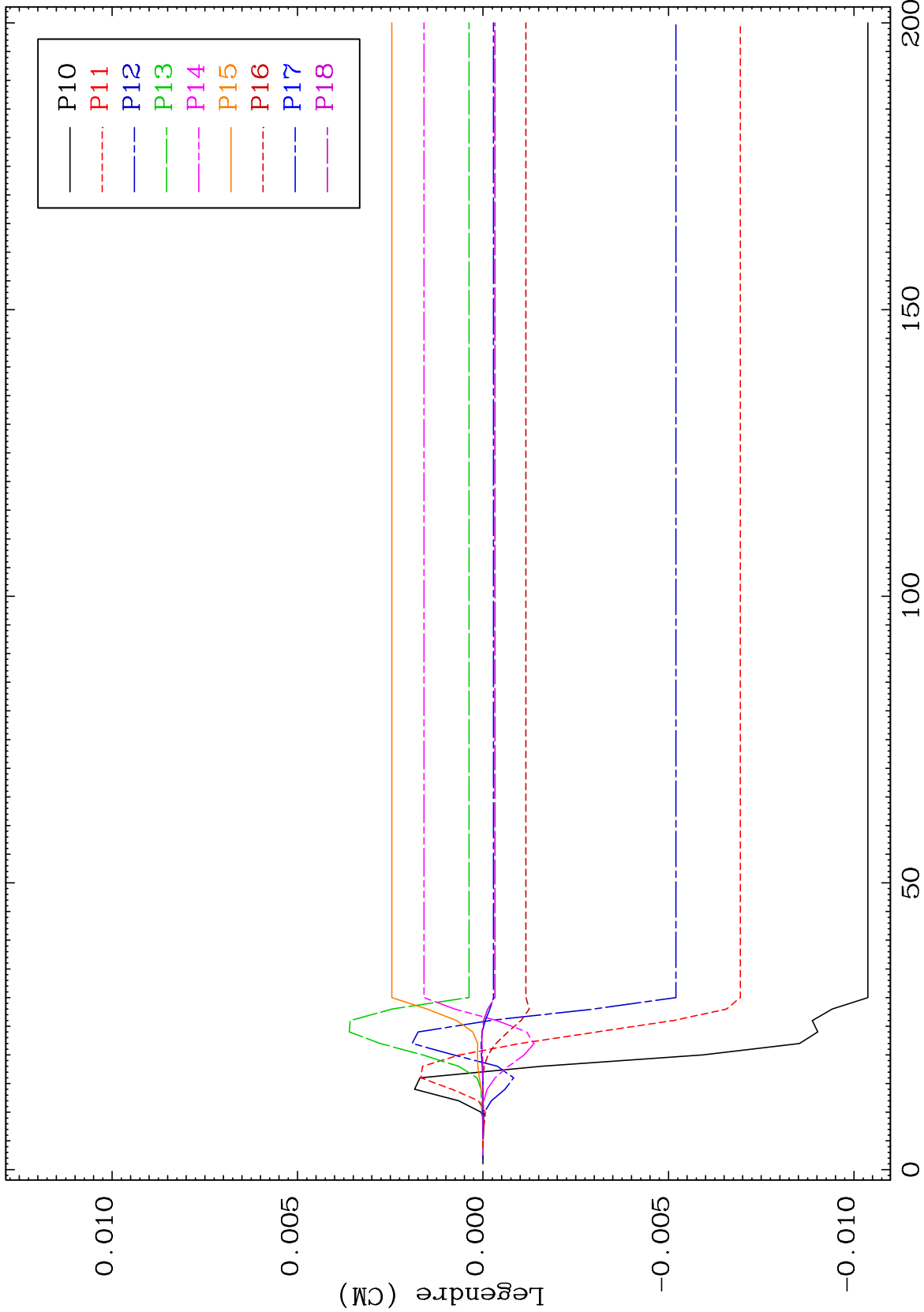


41

MAT 6122

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

61-Pm-138



42

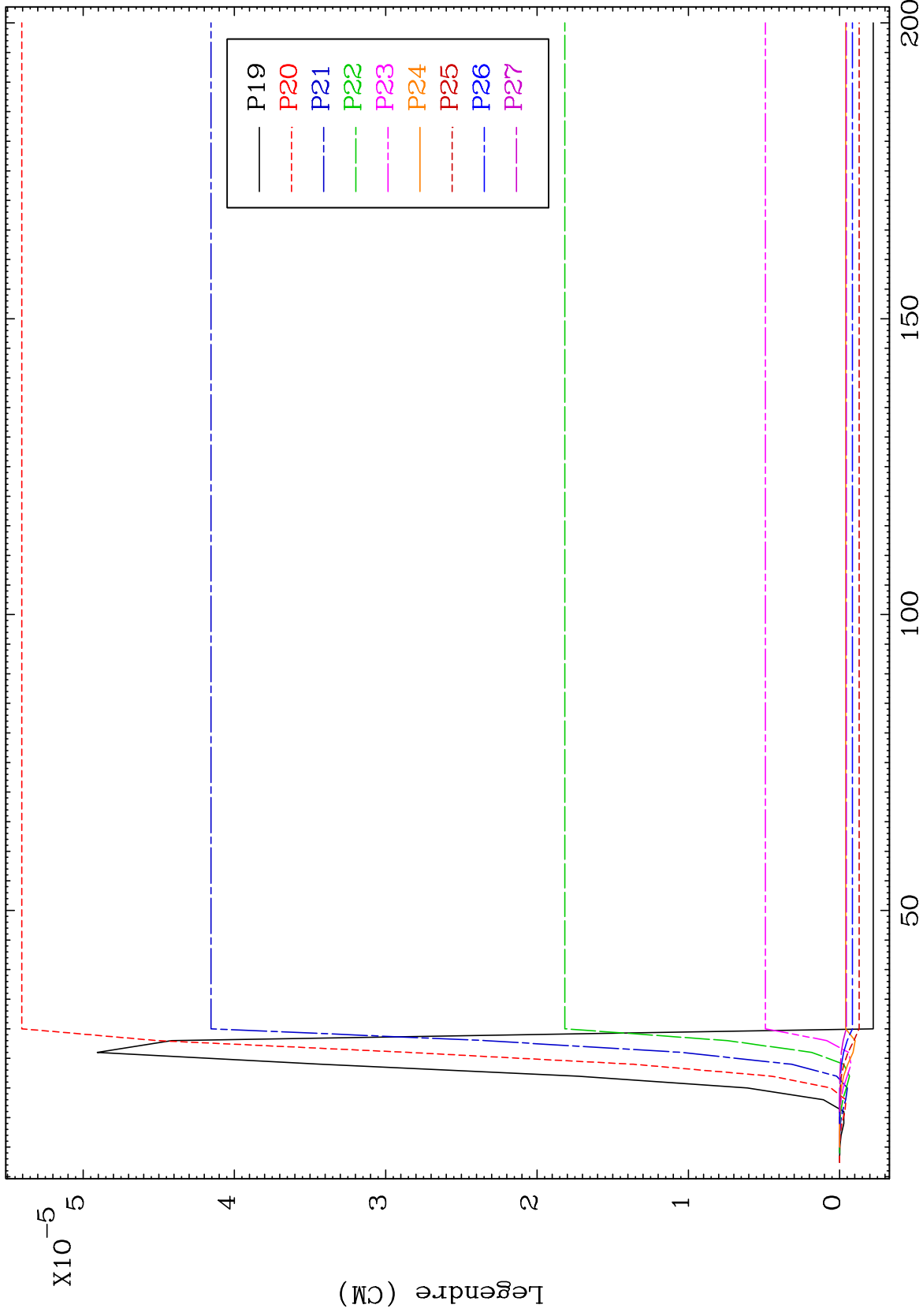
Incident Energy (MeV)

61-Pm-138

MAT 61222

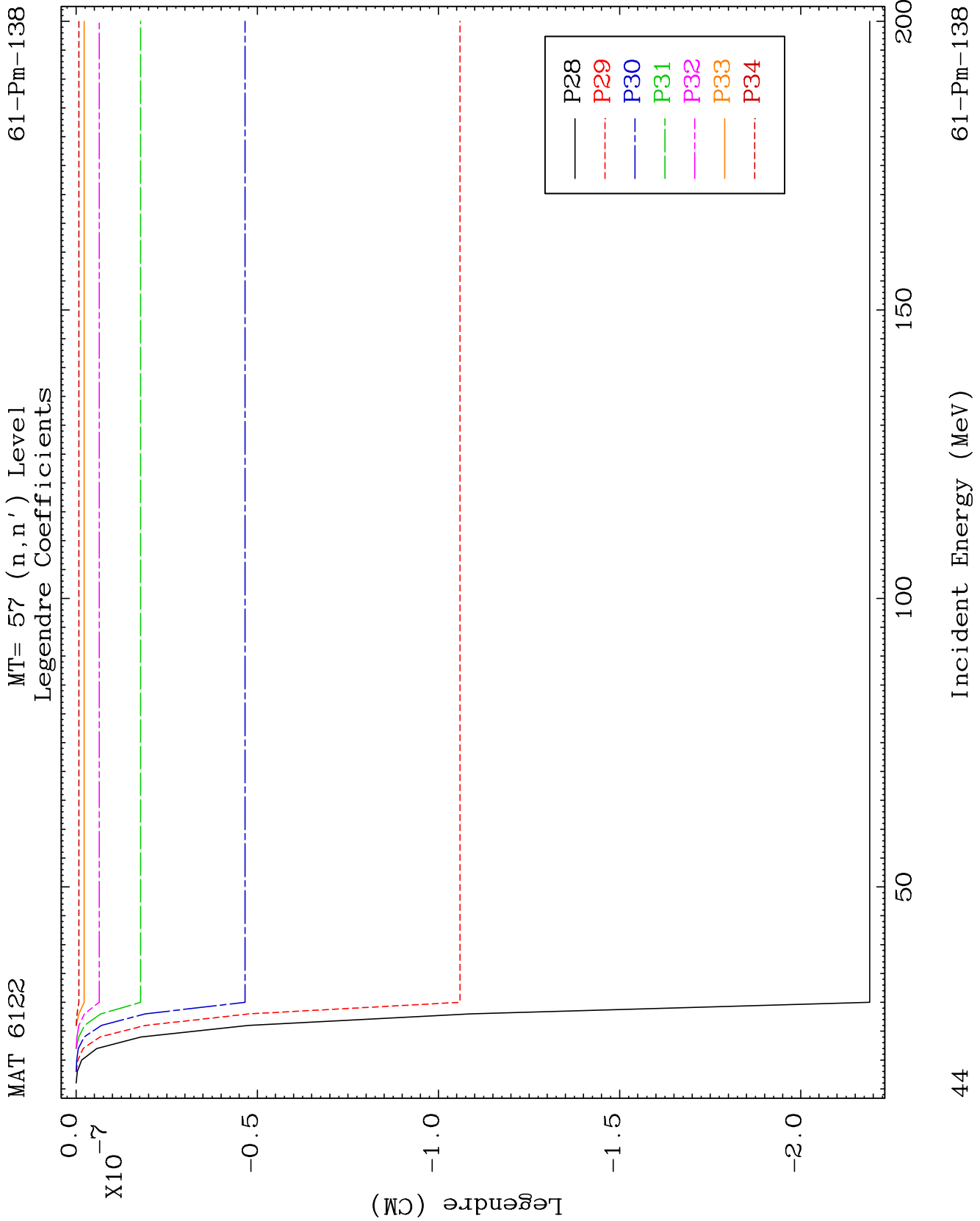
MT= 57 (n,n') Level
Legendre Coefficients

61-Pm-138



43

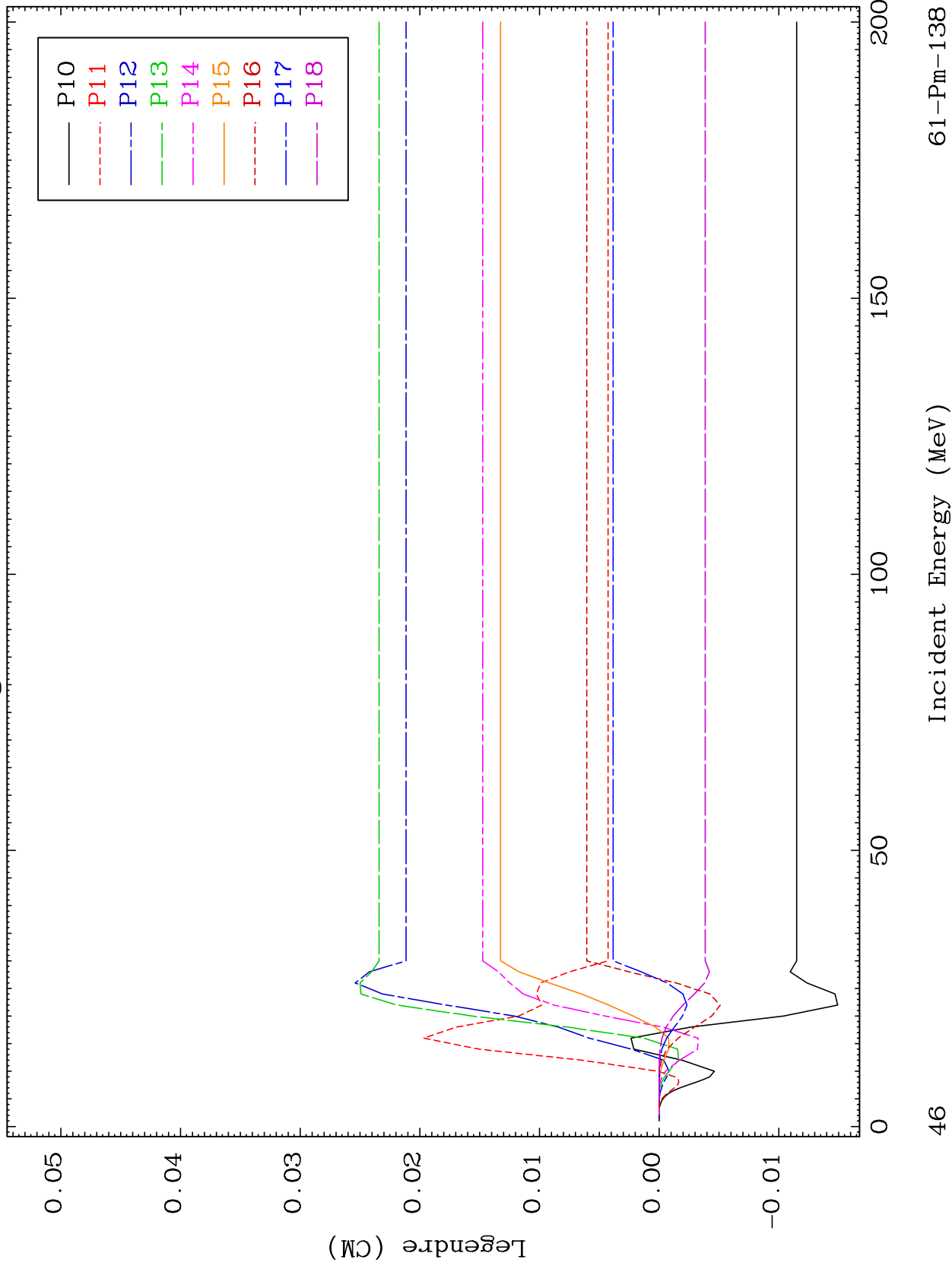
61-Pm-138



MAT 6122

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

61-Pm-138



61-Pm-138

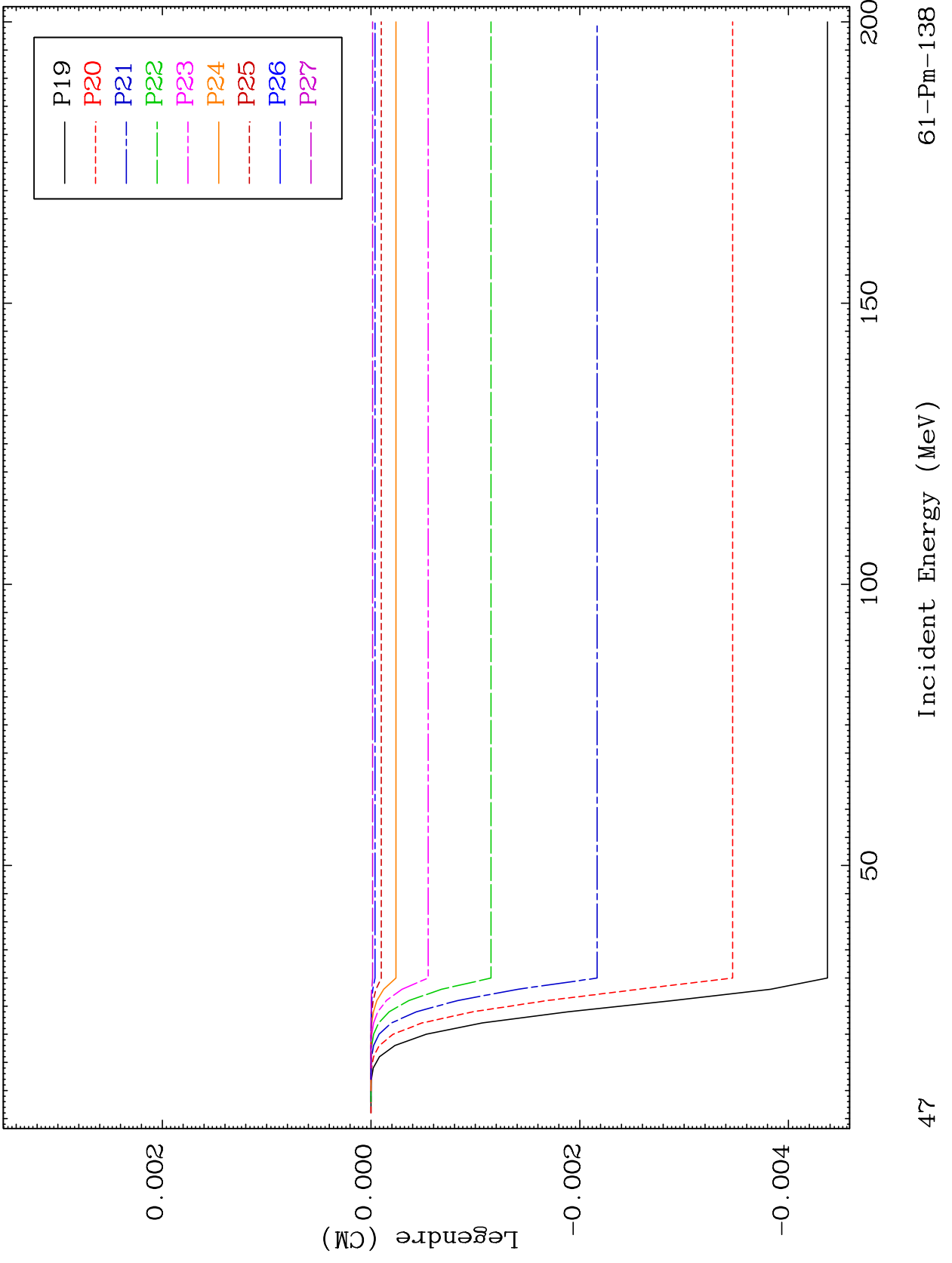
Incident Energy (MeV)

46

MAT 6122

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

61-Pm-138



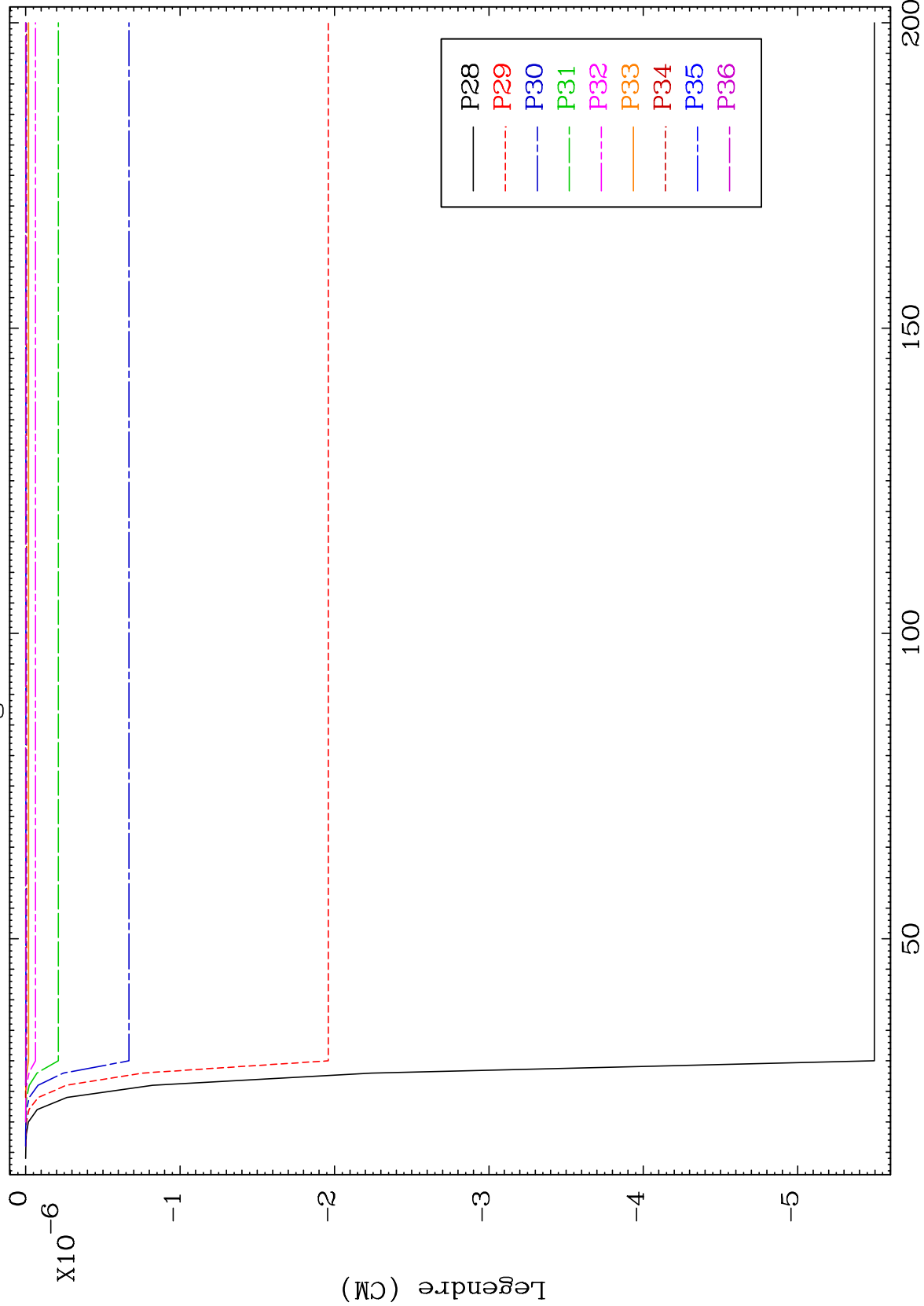
47

MAT 6122

MT= 58 (n,n') Level

61-Pm-138

Legendre Coefficients



61-Pm-138

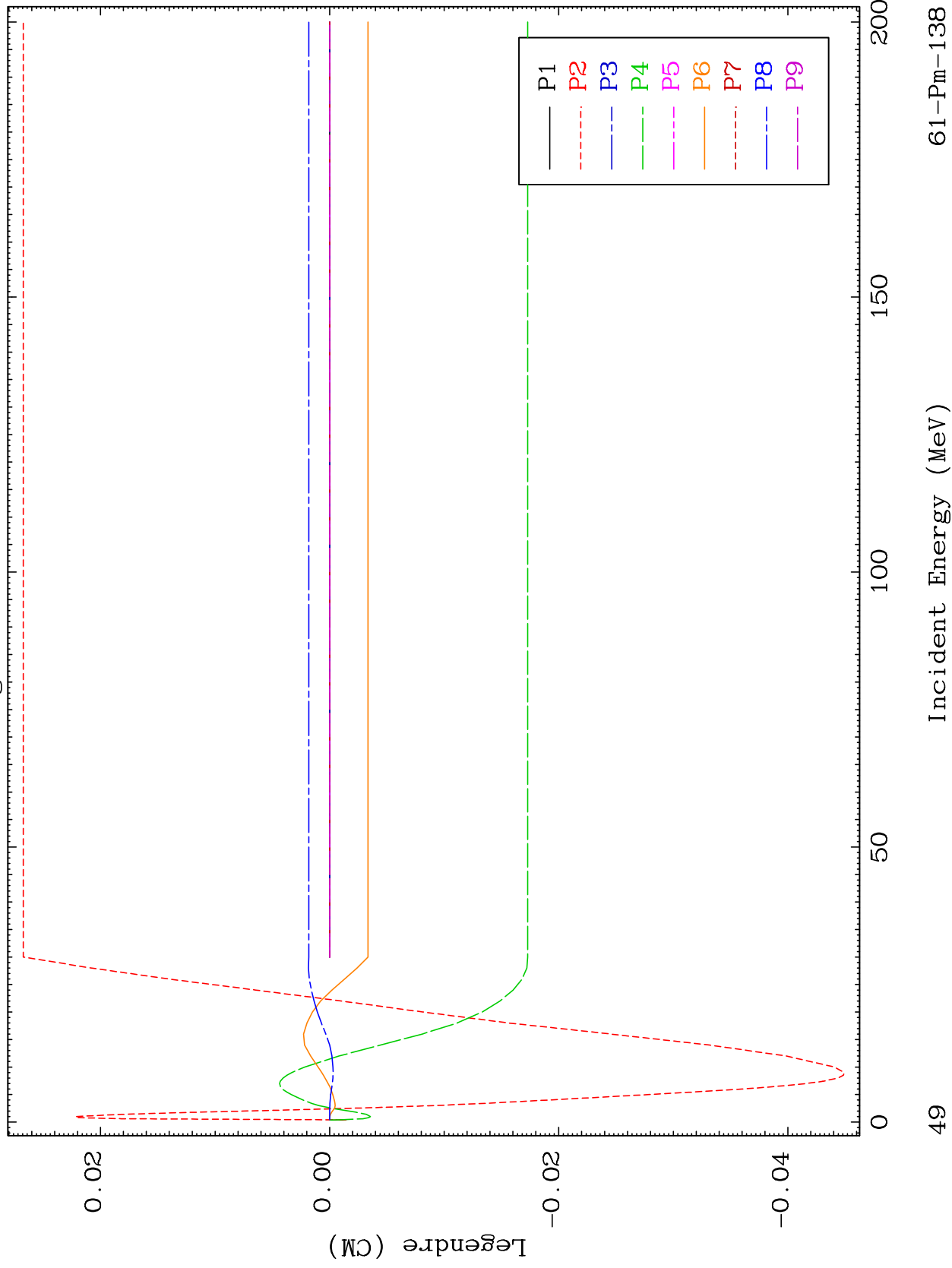
Incident Energy (MeV)

48

MAT 61222

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

61-Pm-138



61-Pm-138

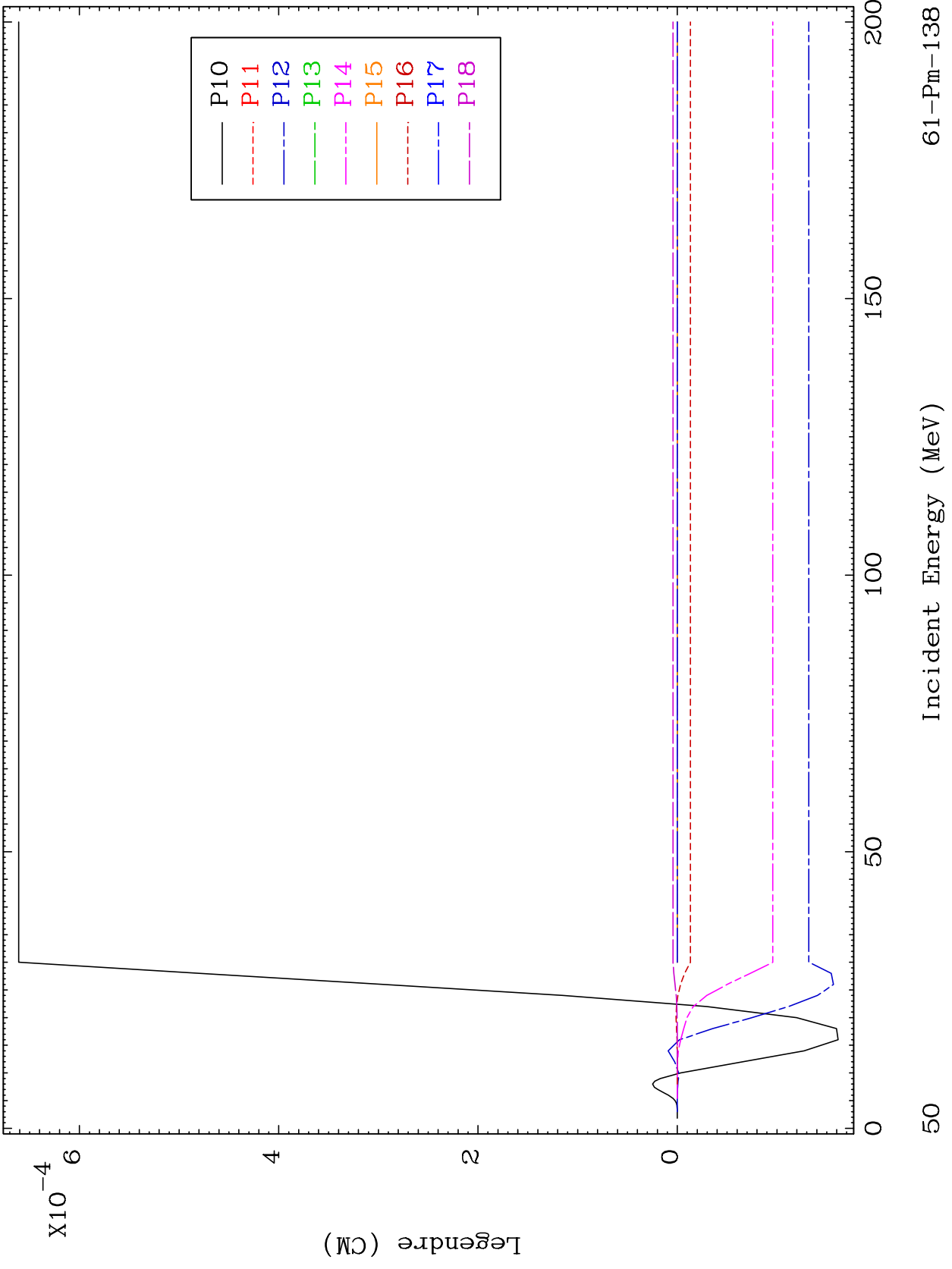
Incident Energy (MeV)

49

MAT 6122

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

61-Pm-138

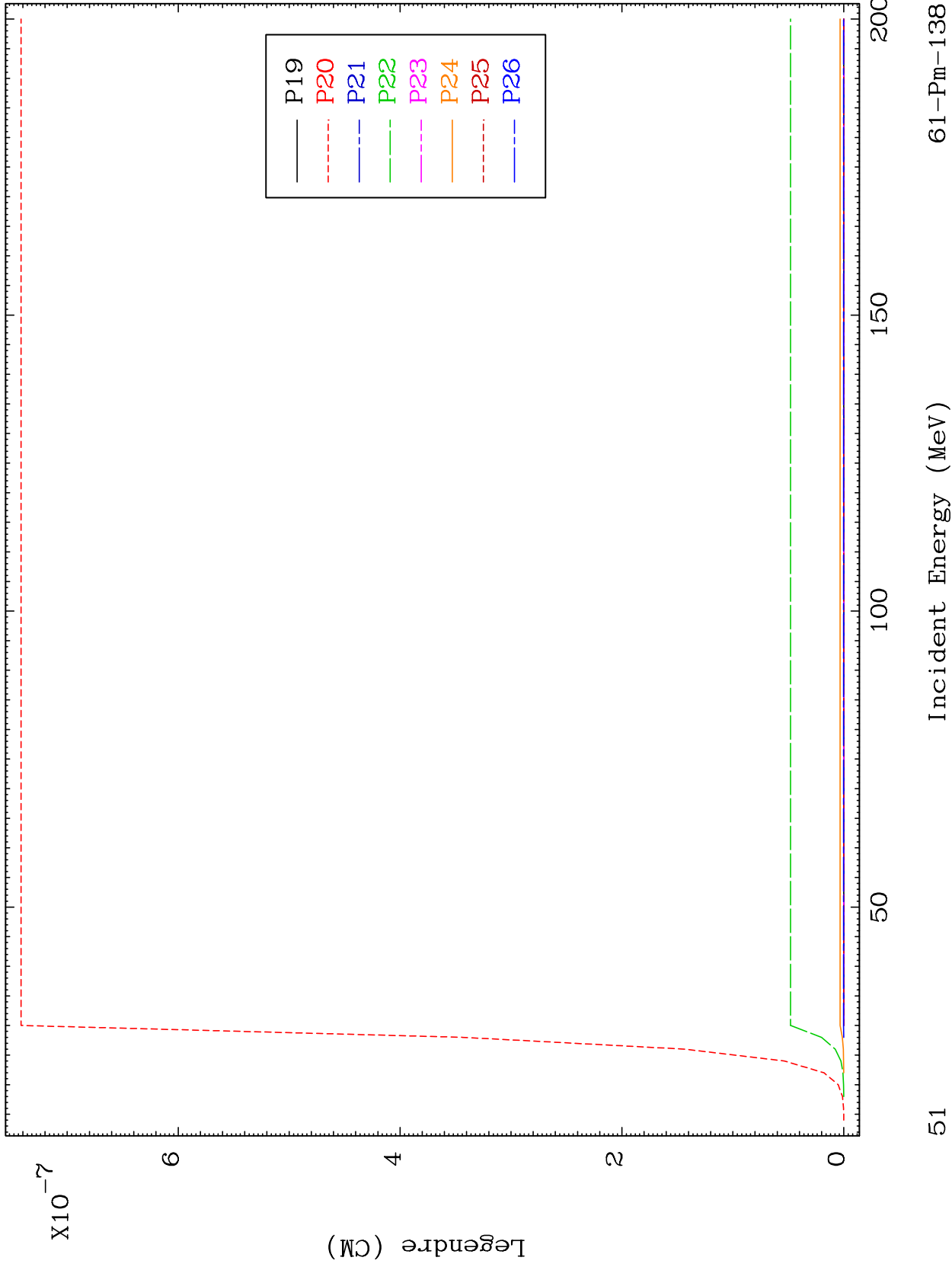


61-Pm-138

MAT 6122

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

61-Pm-138



51

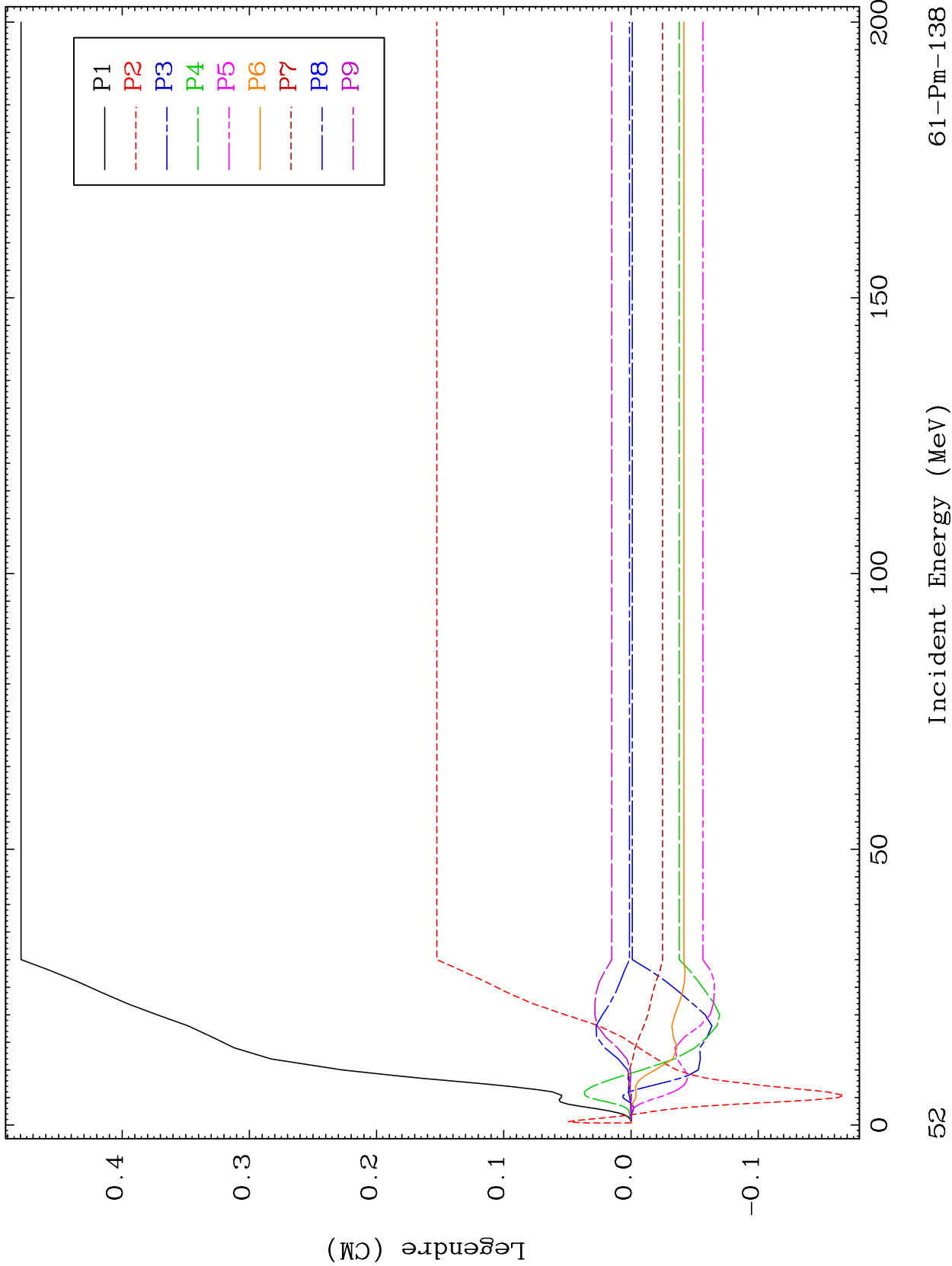
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

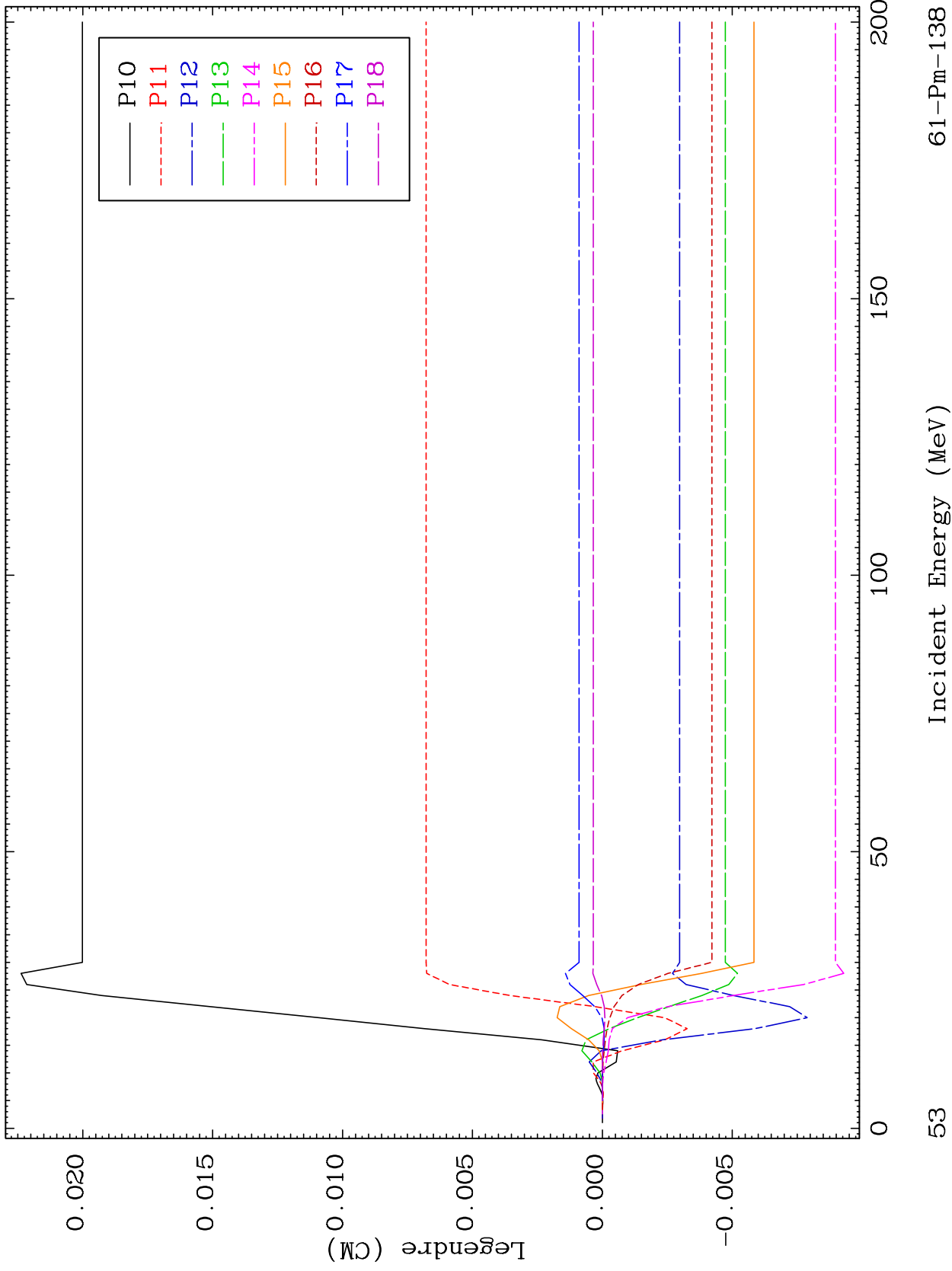
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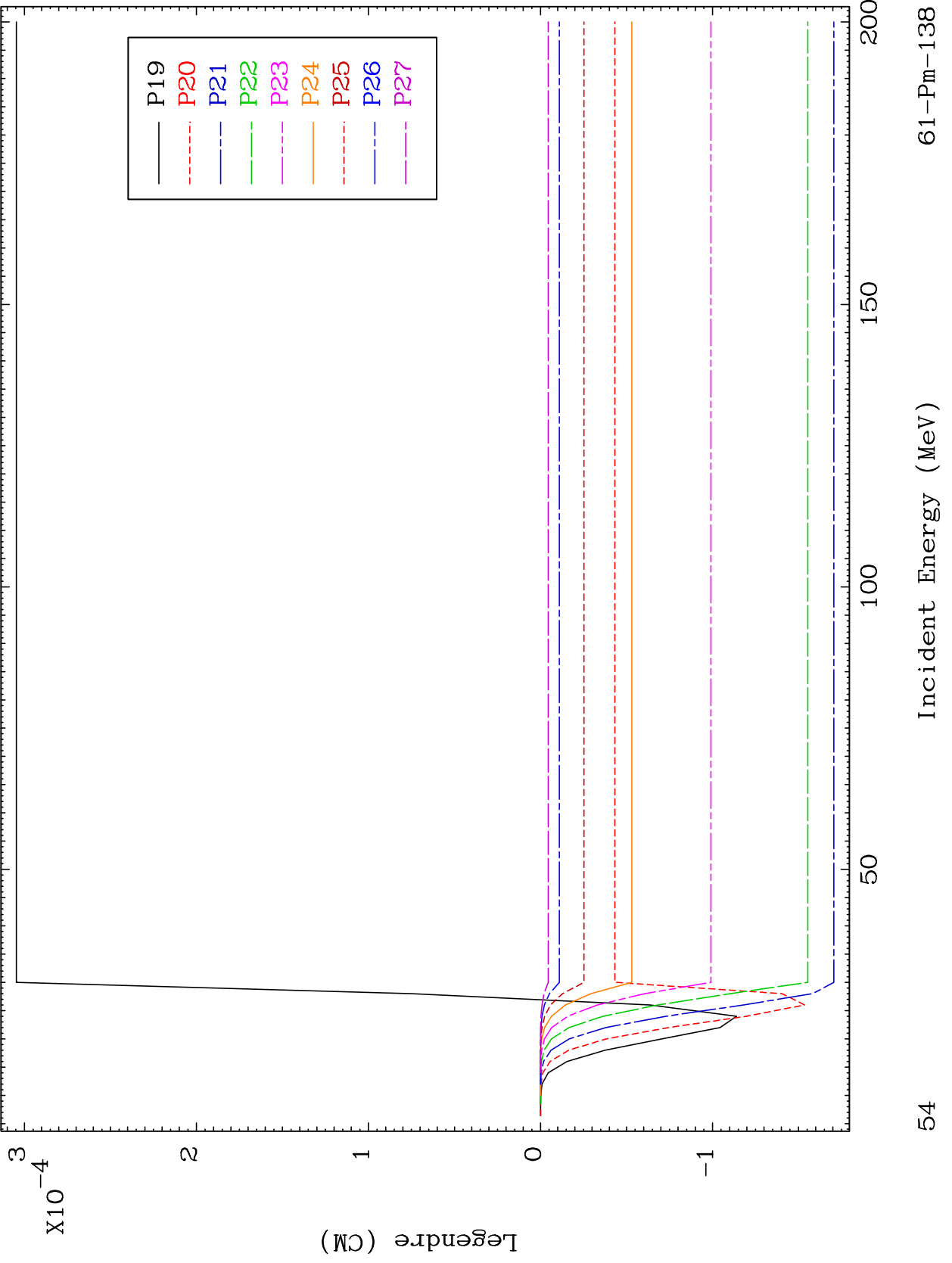


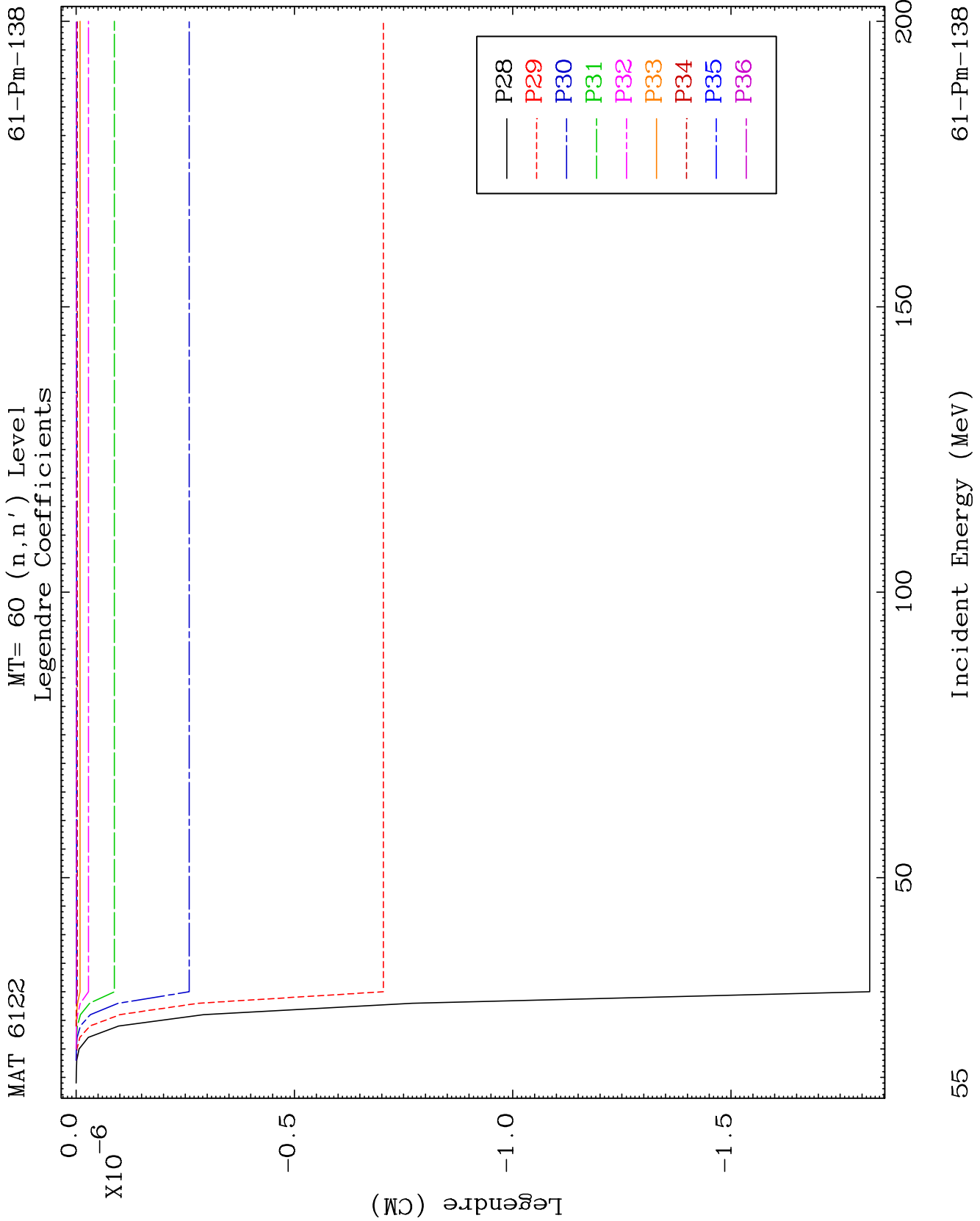
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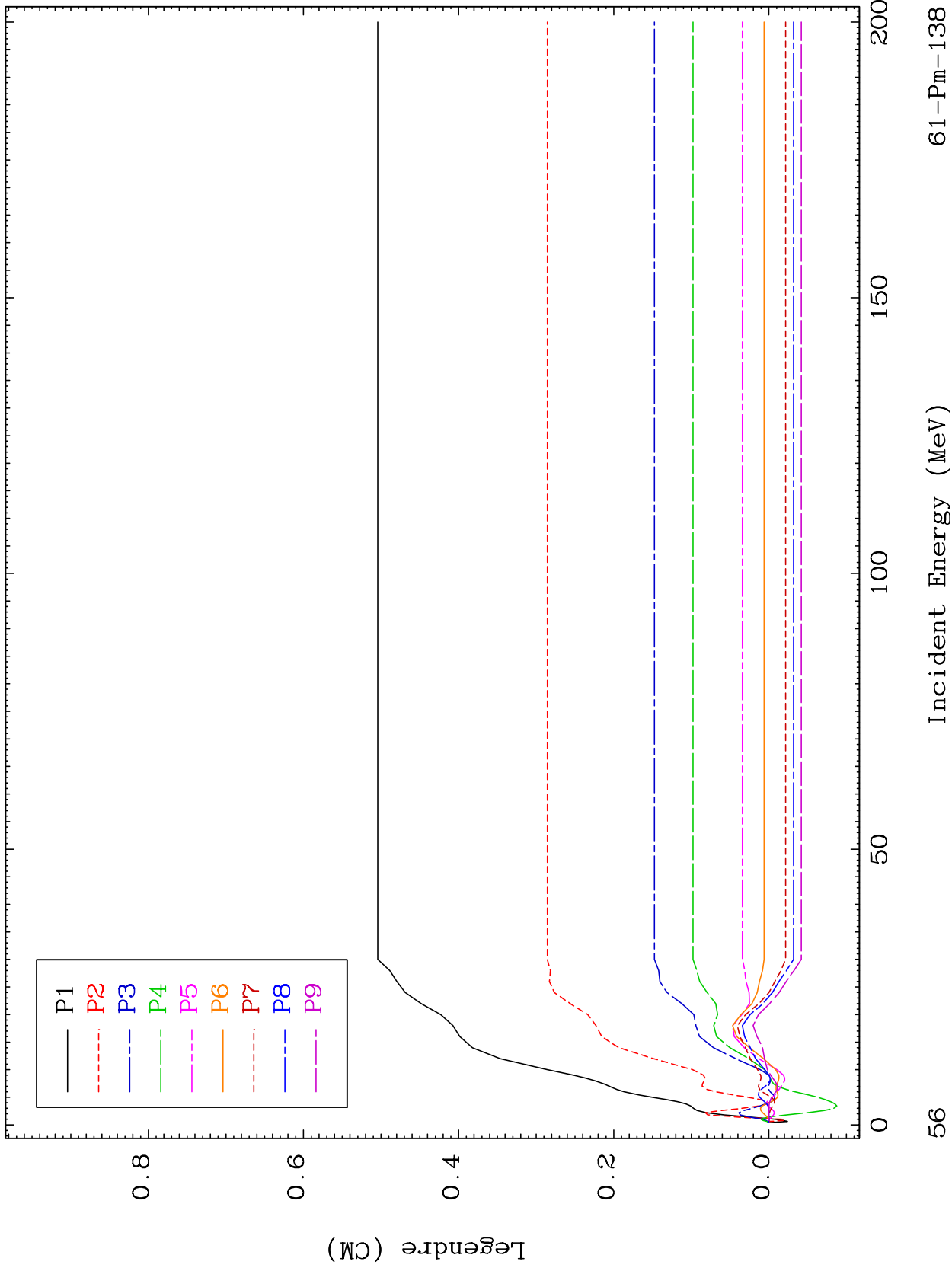
Incident Energy (MeV)

52





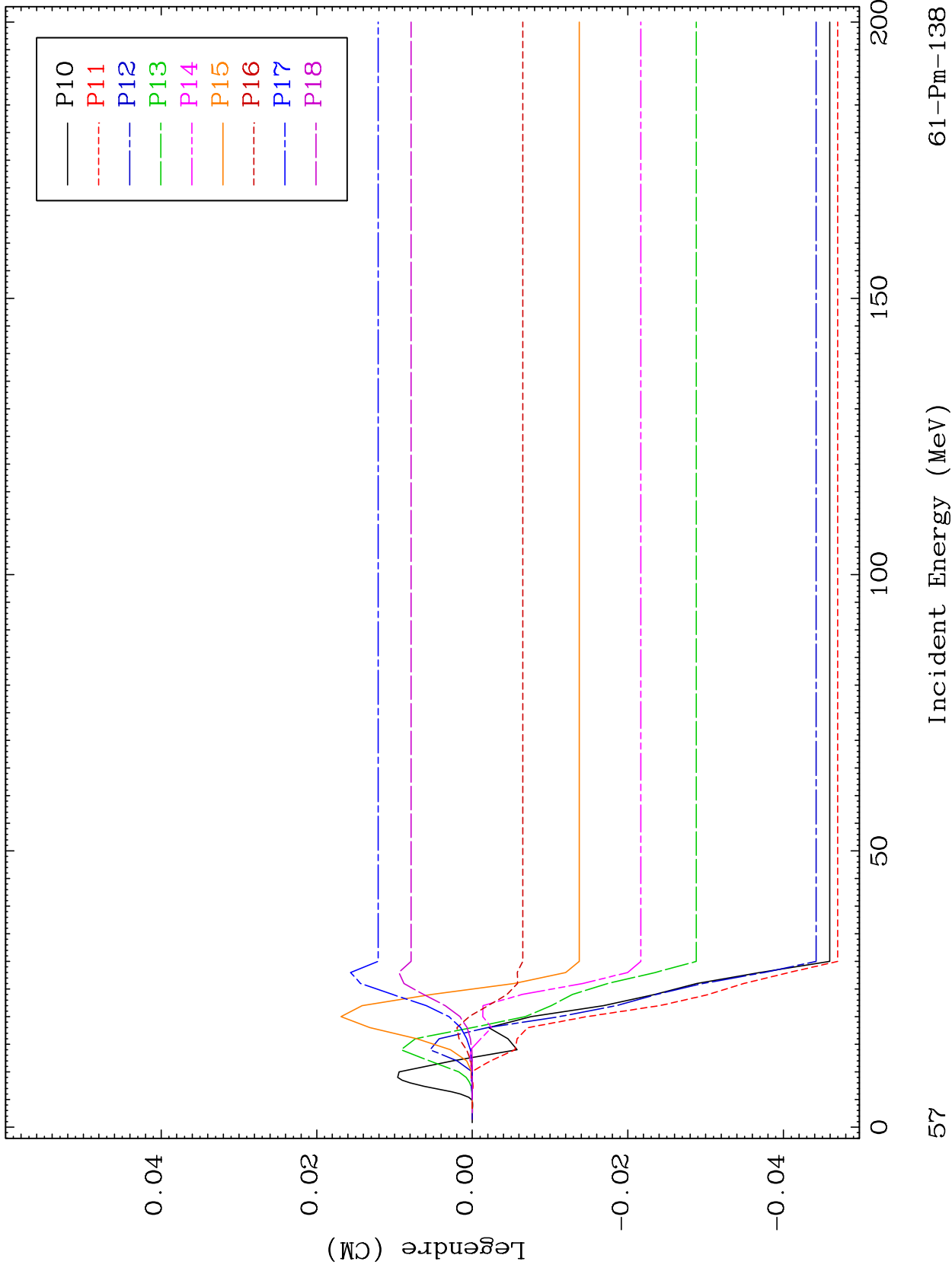




MAT 6122

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

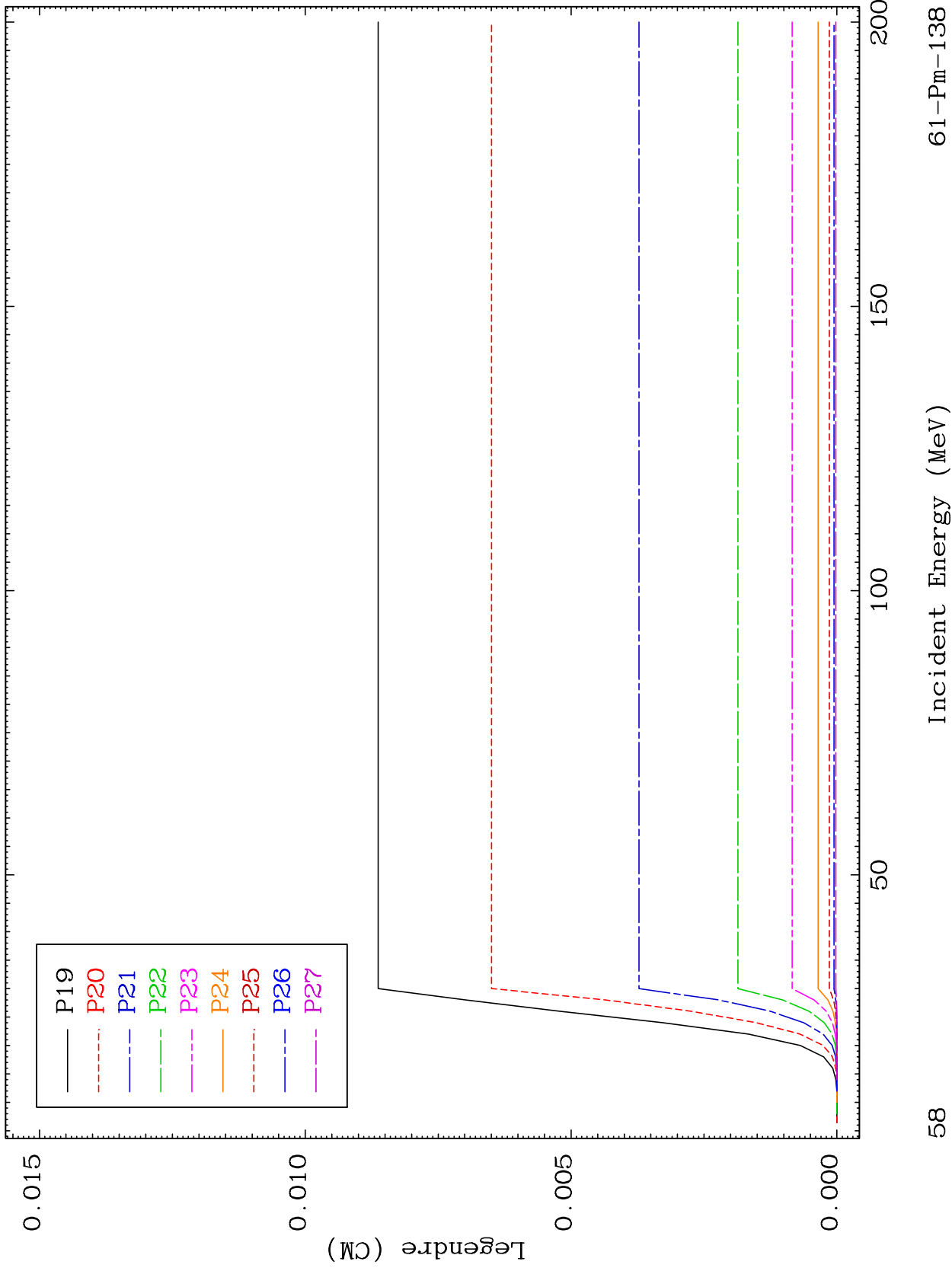
61-Pm-138



57

Incident Energy (MeV)

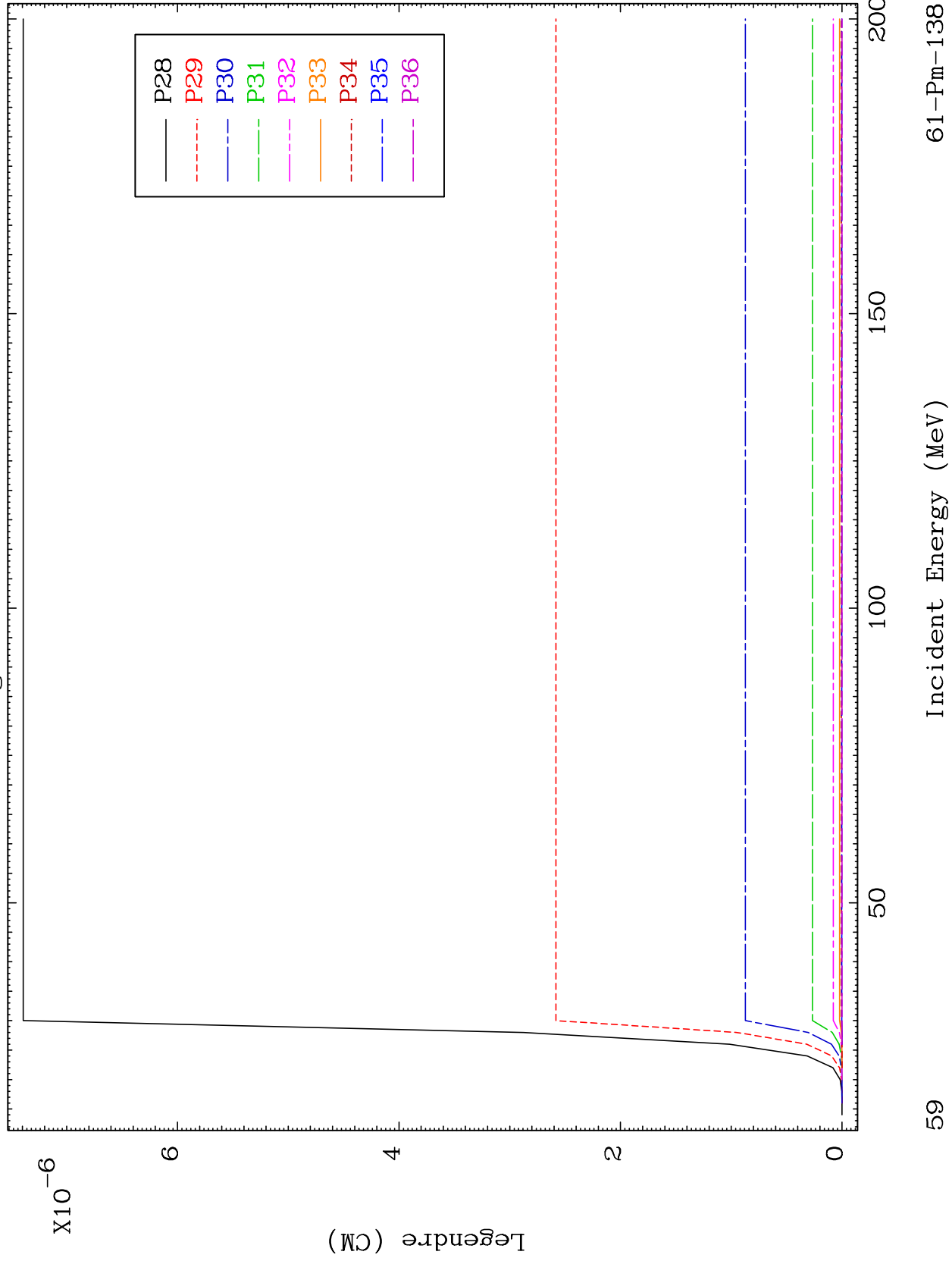
61-Pm-138



MAT 6122

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

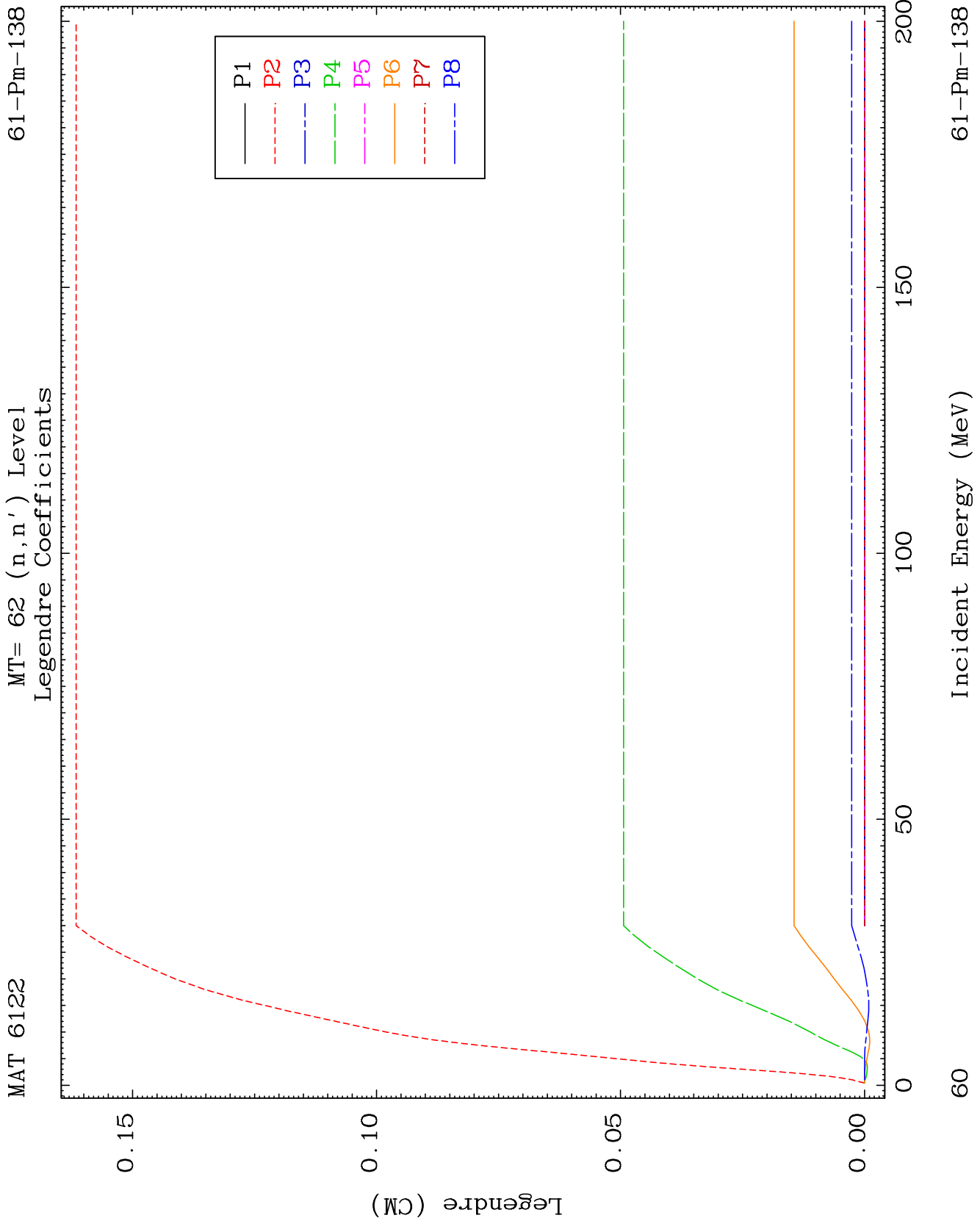
61-Pm-138

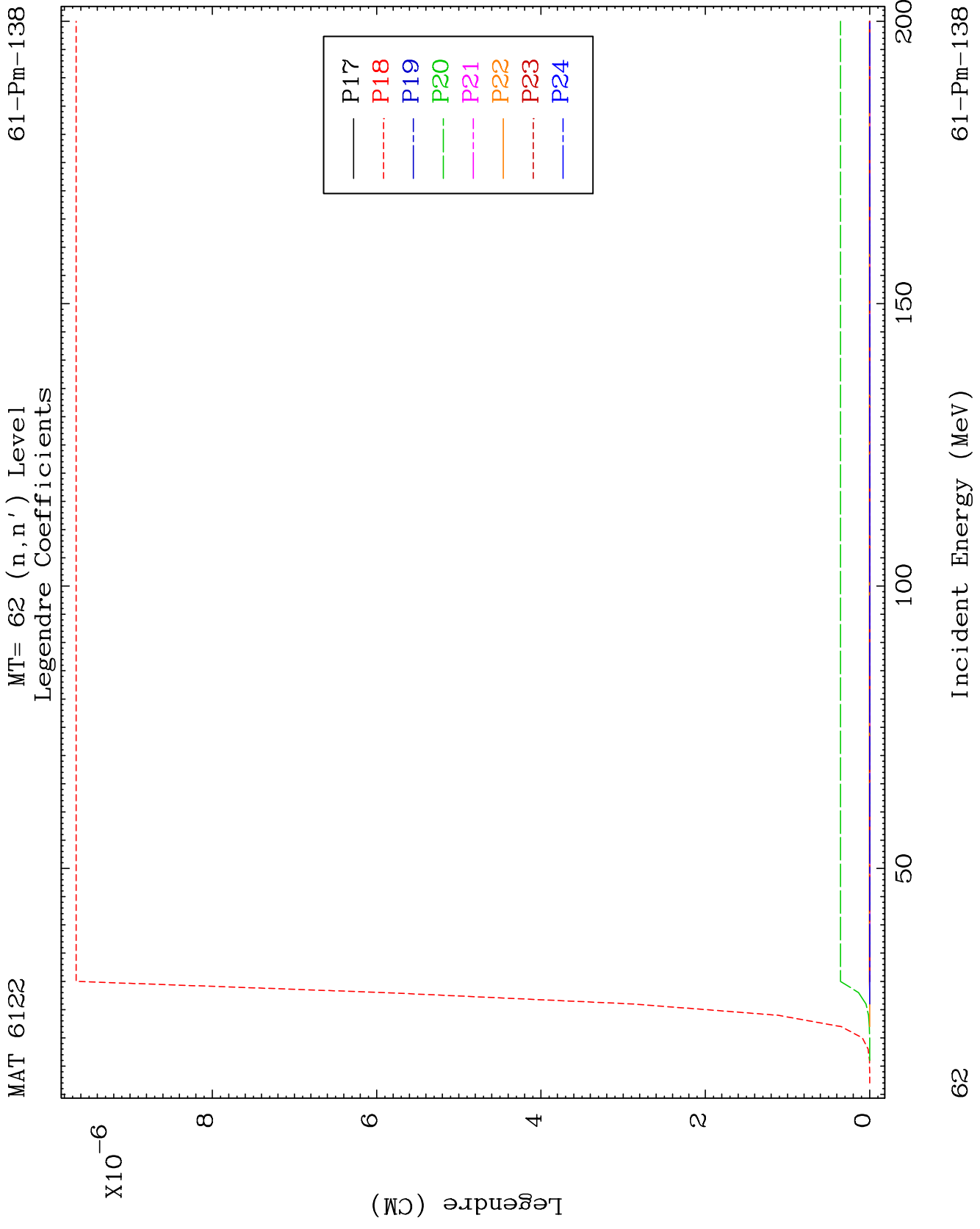


59

Incident Energy (MeV)

61-Pm-138

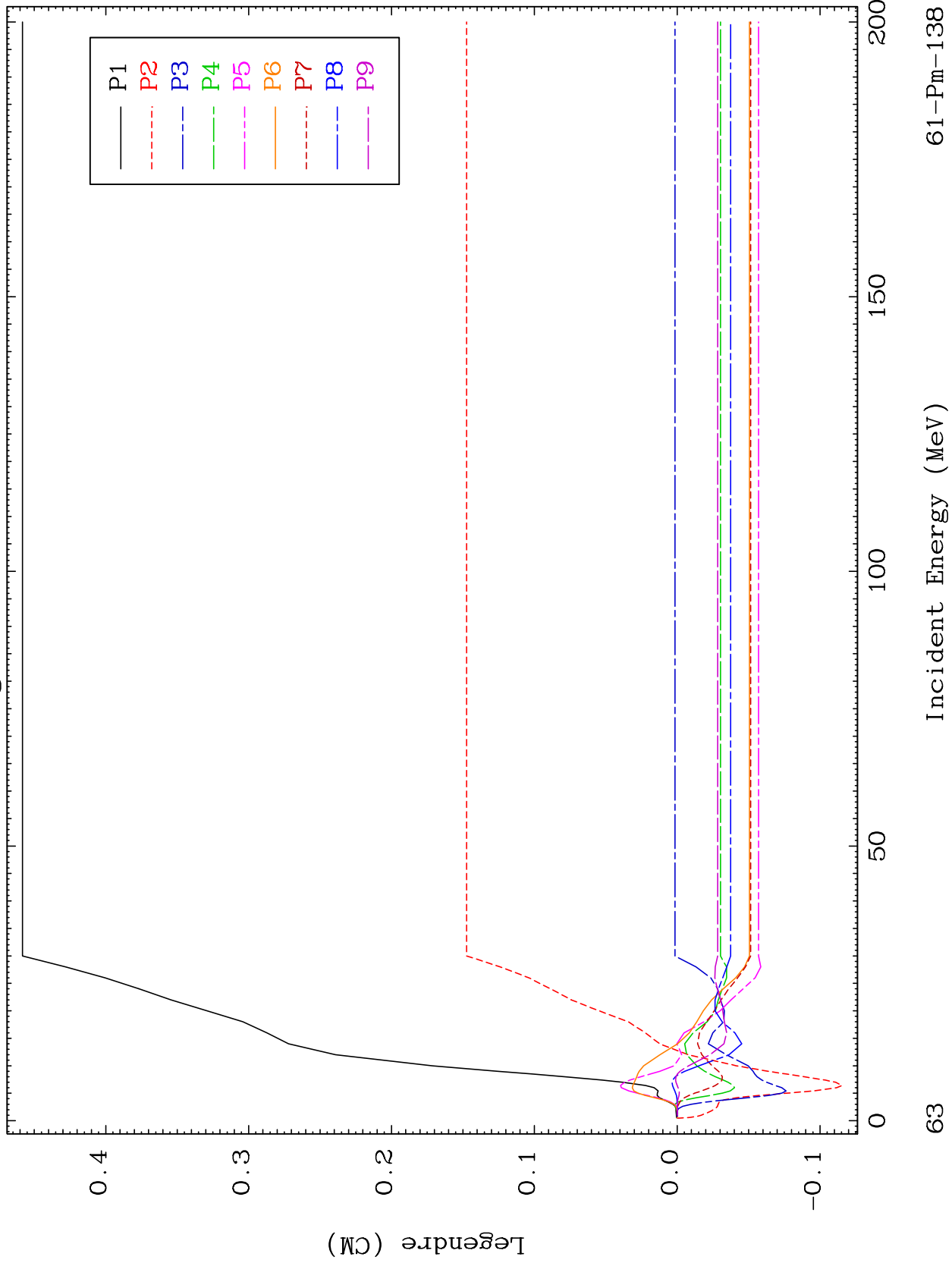




MAT 6122

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

61-Pm-138



61-Pm-138

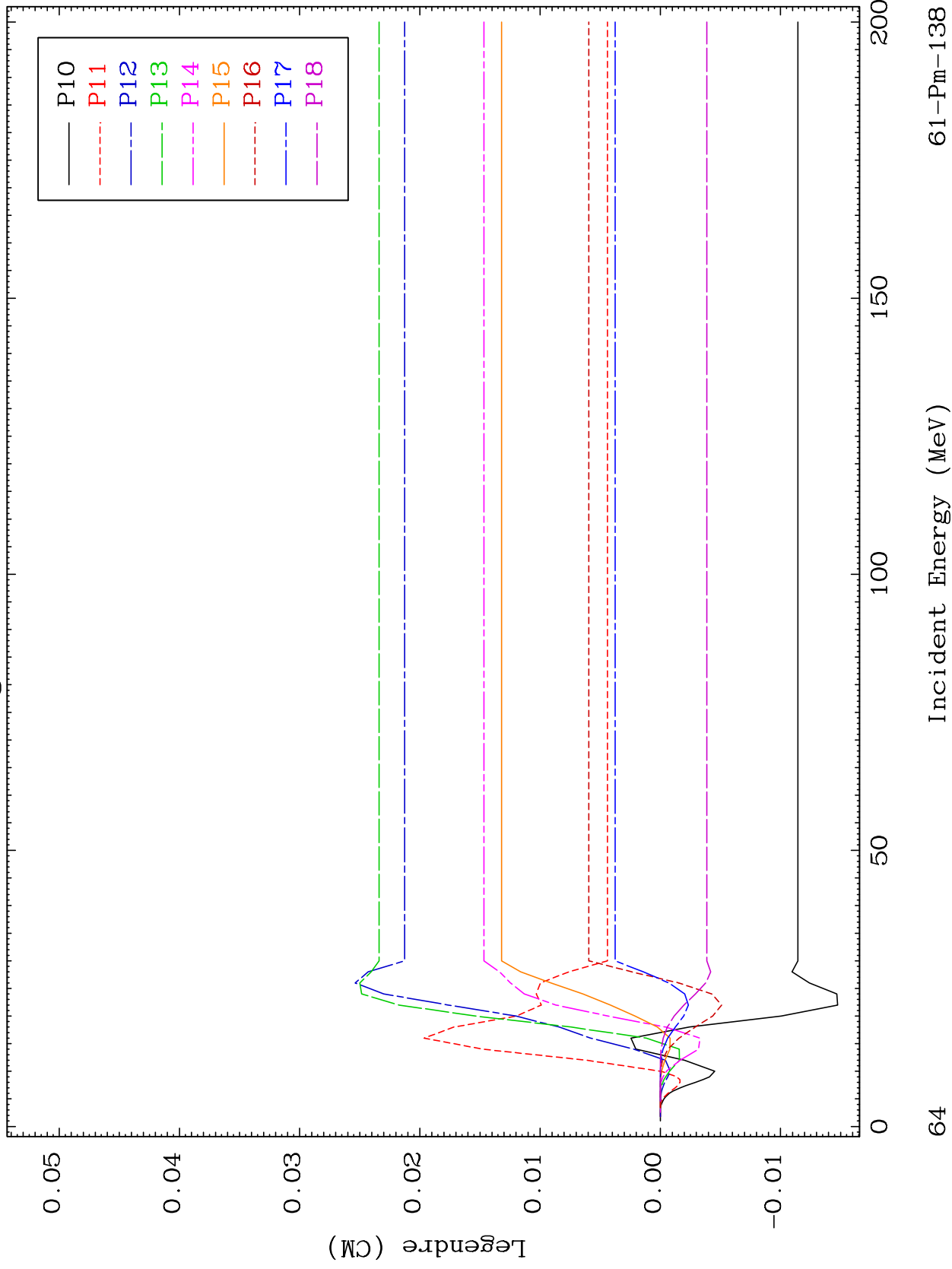
Incident Energy (MeV)

63

MAT 6122

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

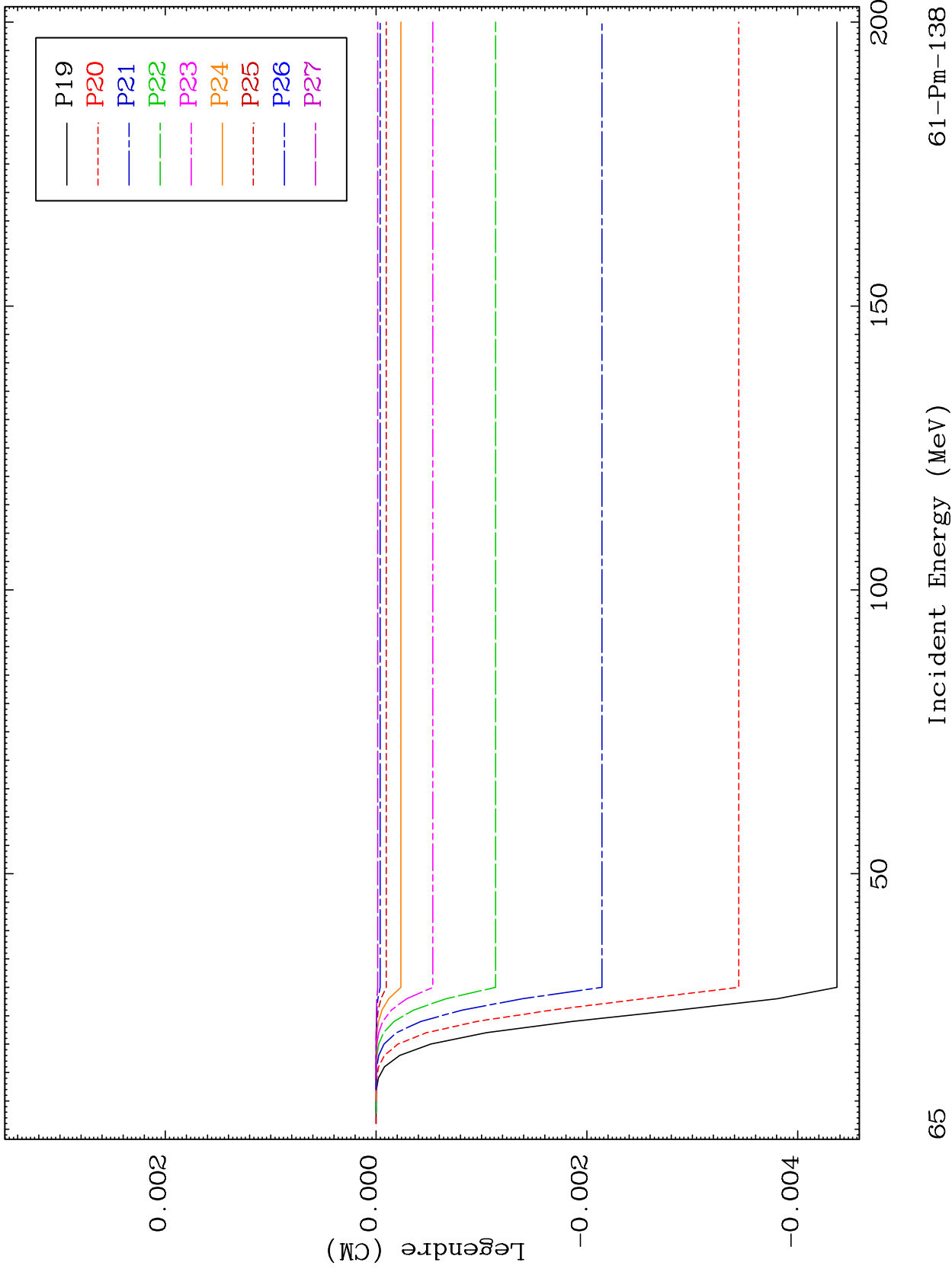
61-Pm-138



MAT 6122

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

61-Pm-138



65

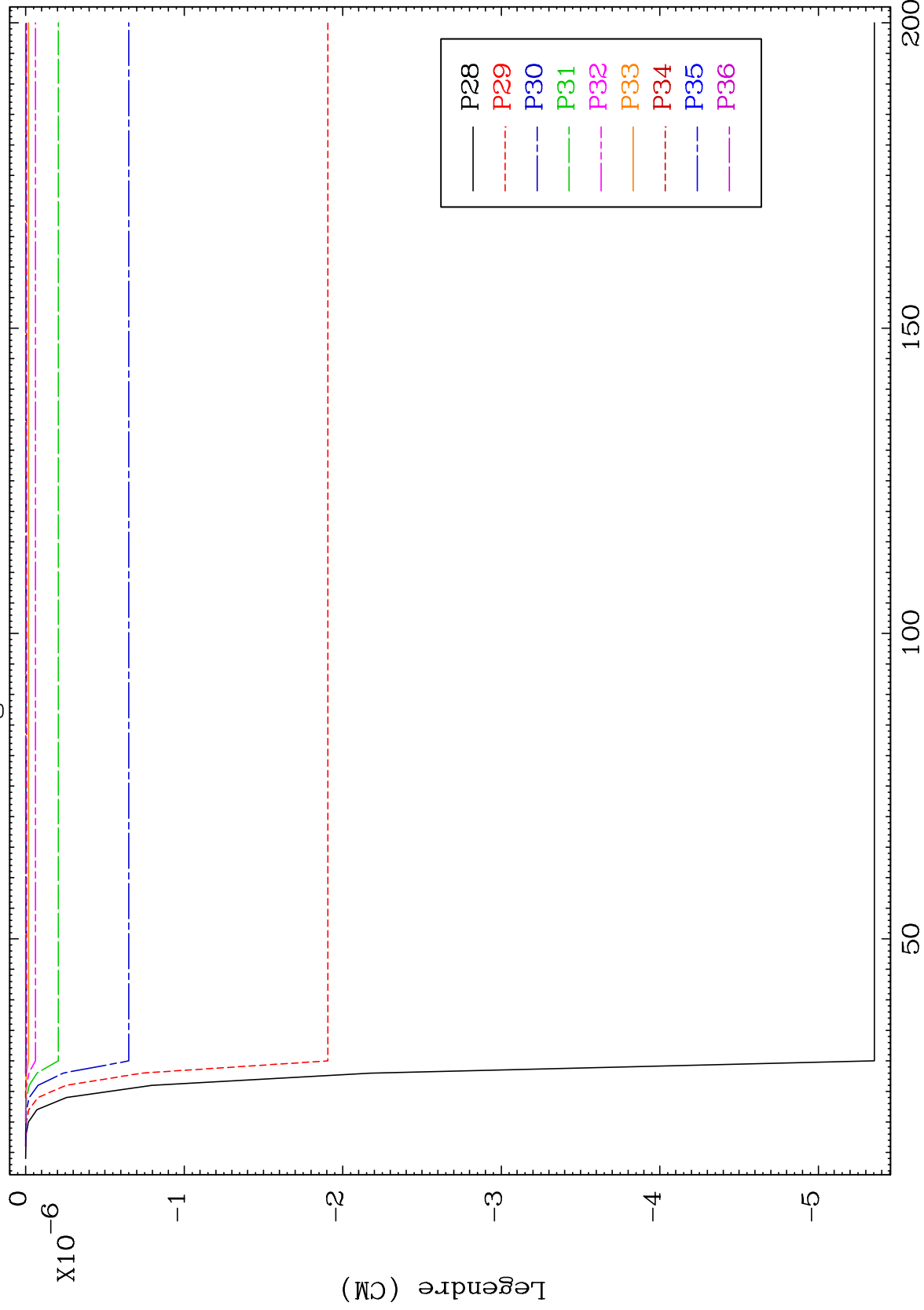
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



66

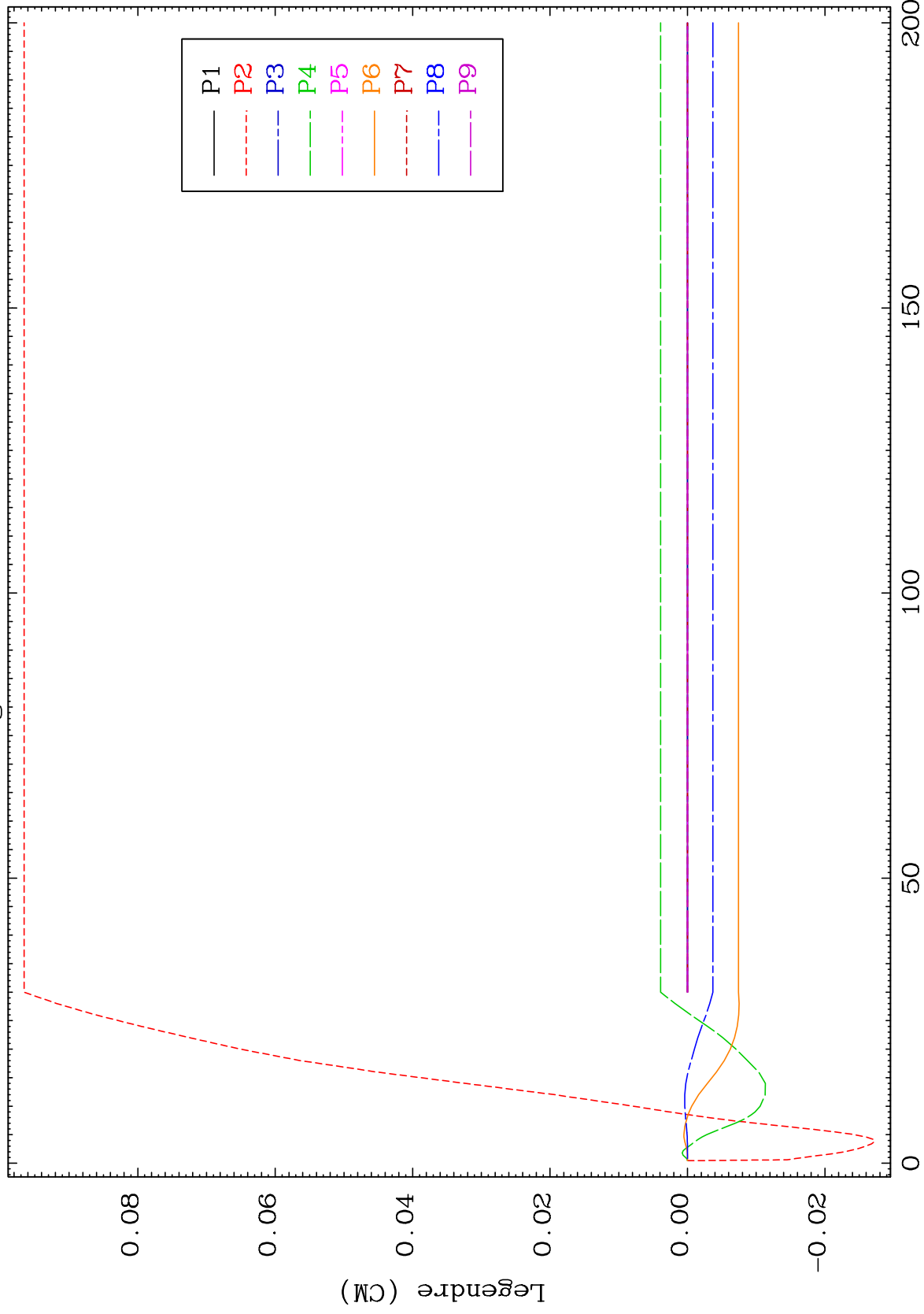
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



61-Pm-138

Incident Energy (MeV)

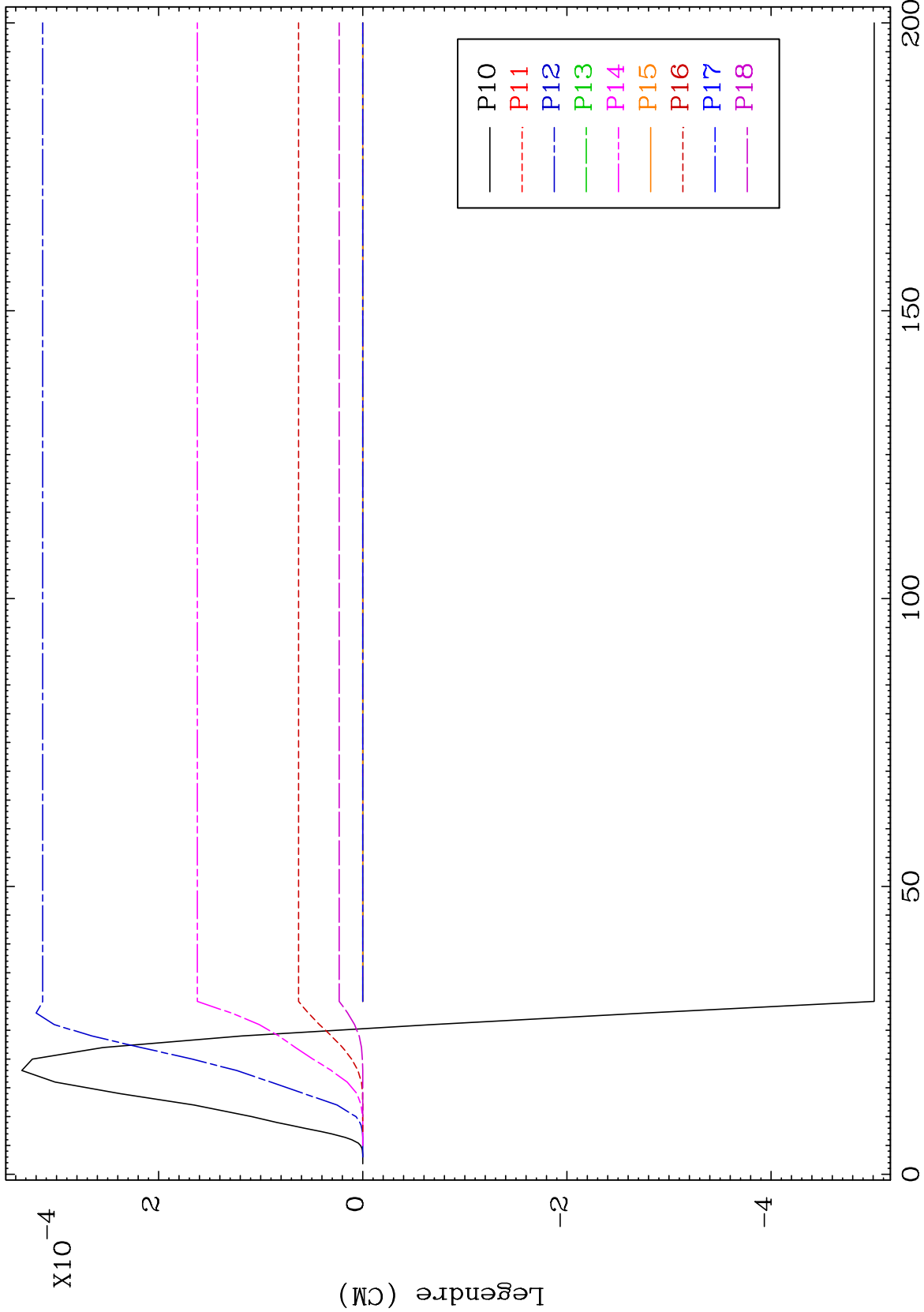
67

MAT 6122

MT= 64 (n,n') Level

61-Pm-138

Legendre Coefficients



68

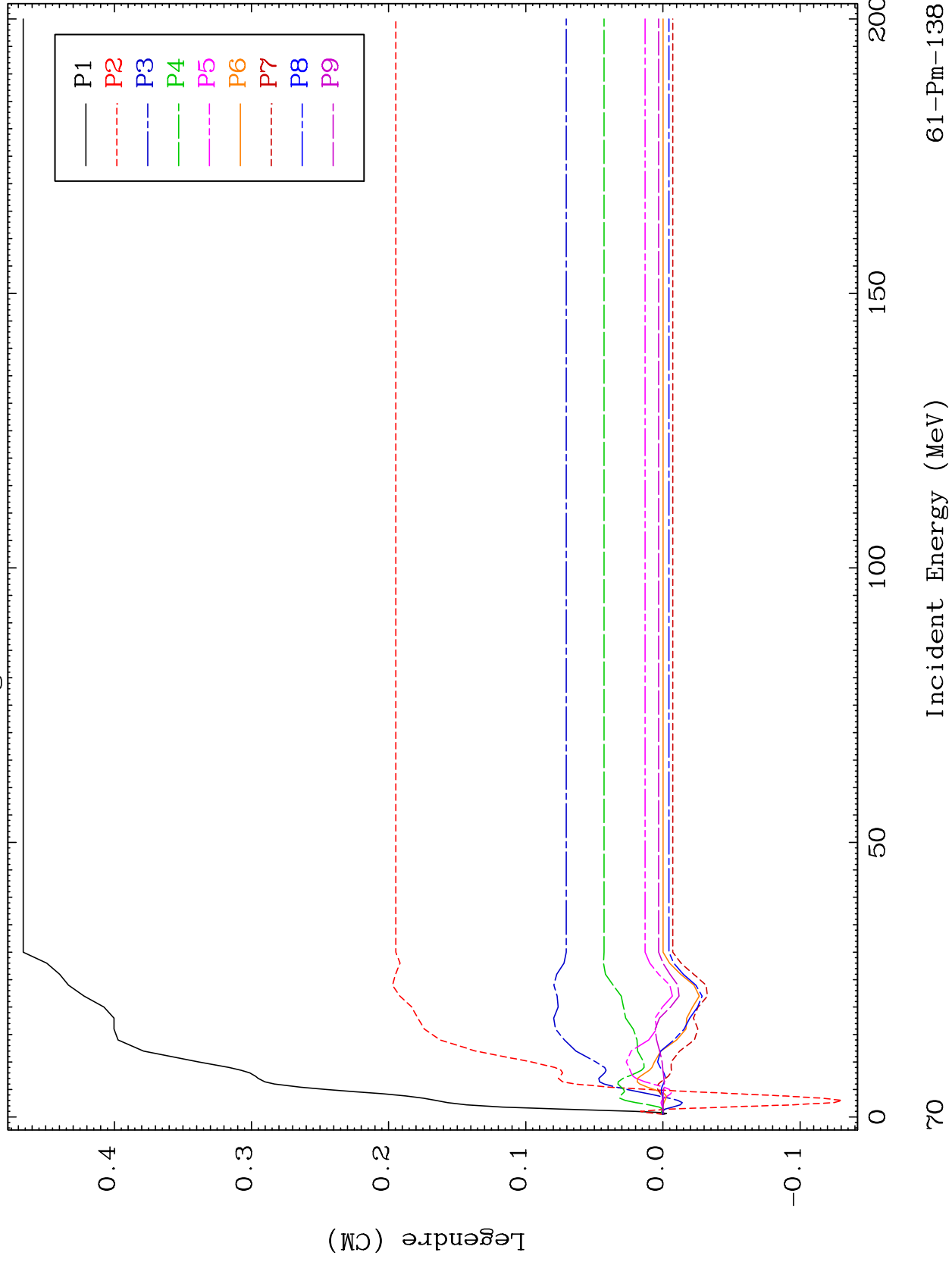
Incident Energy (MeV)

61-Pm-138

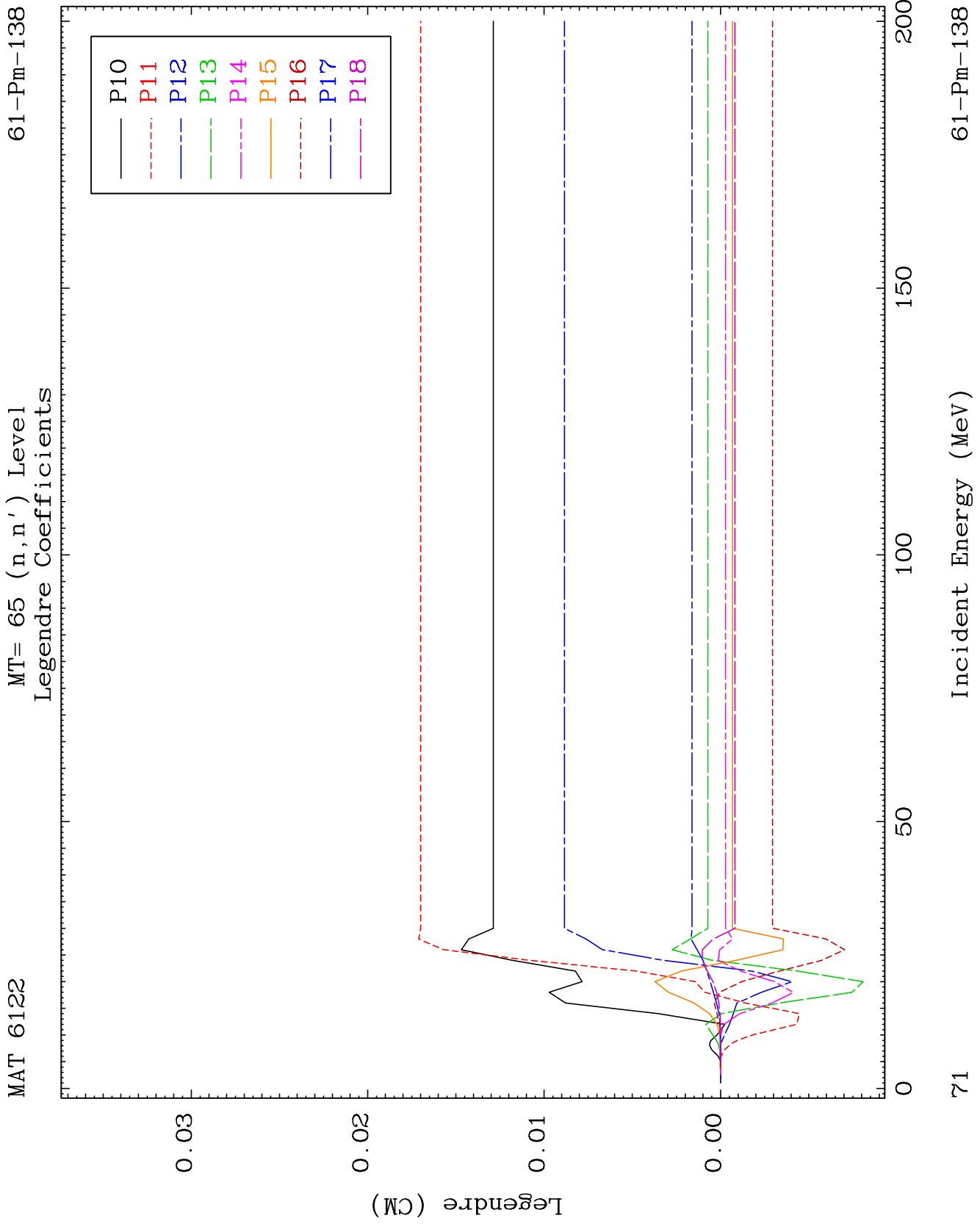
MAT 6122

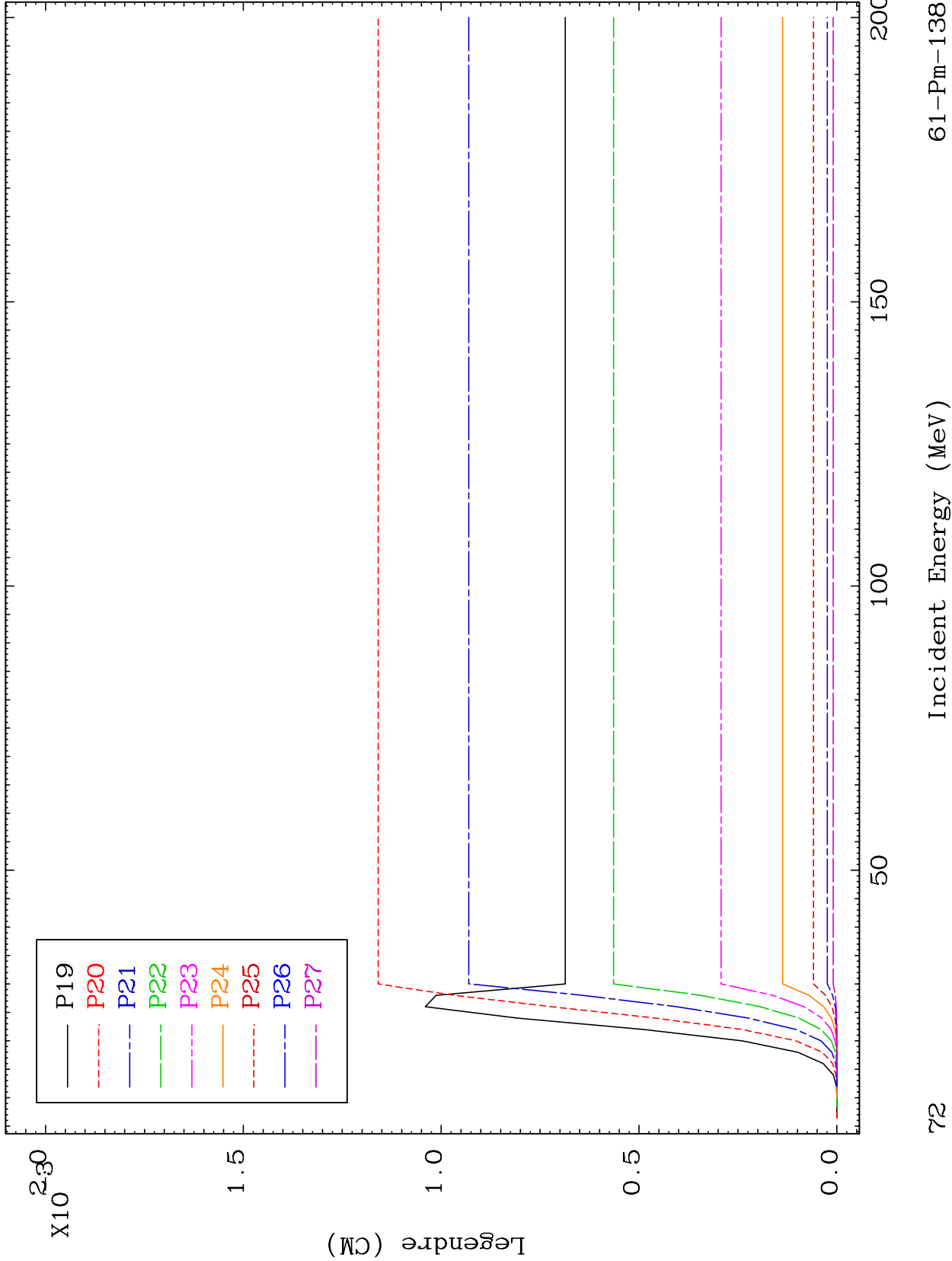
MT= 65 (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

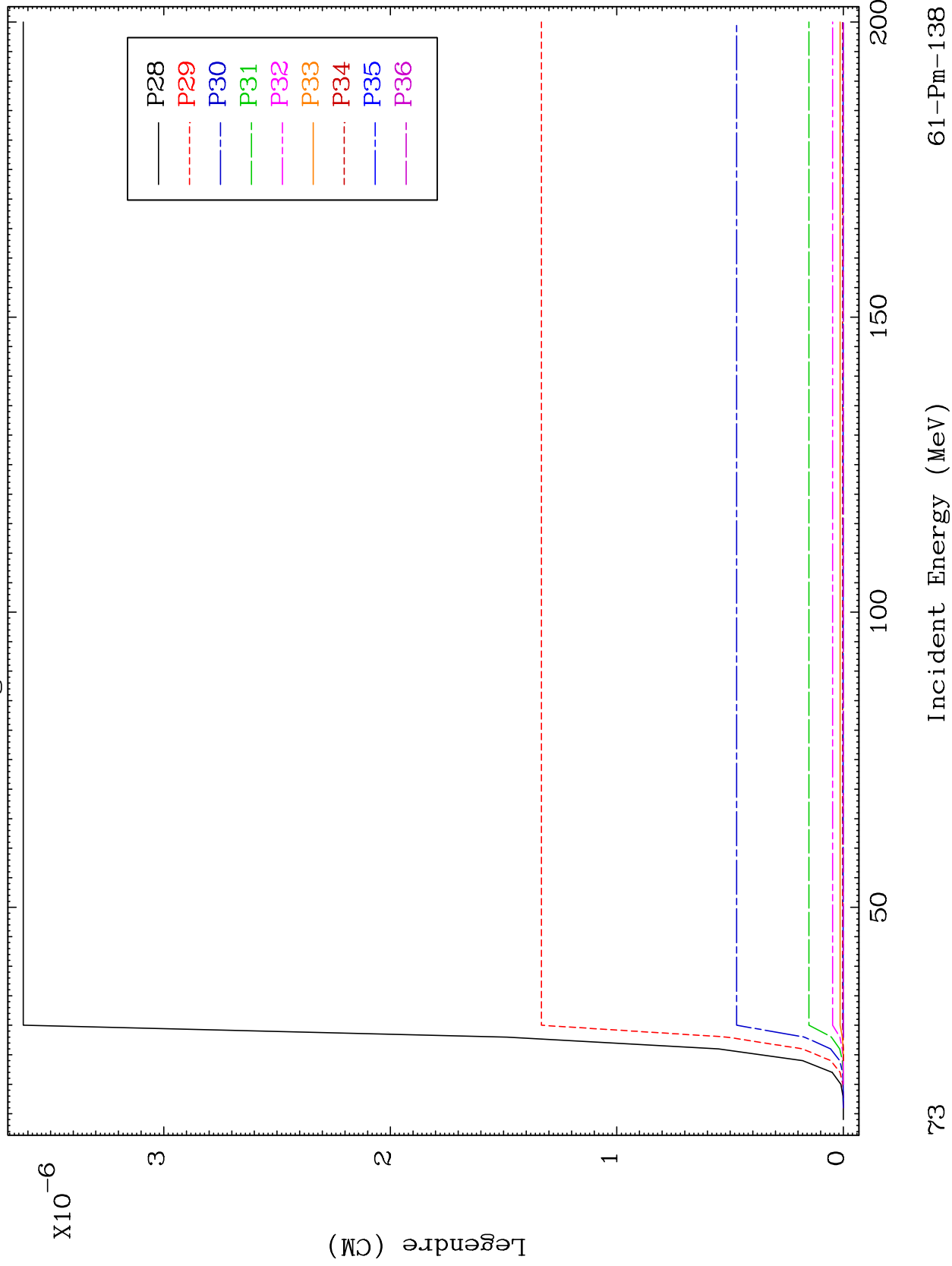


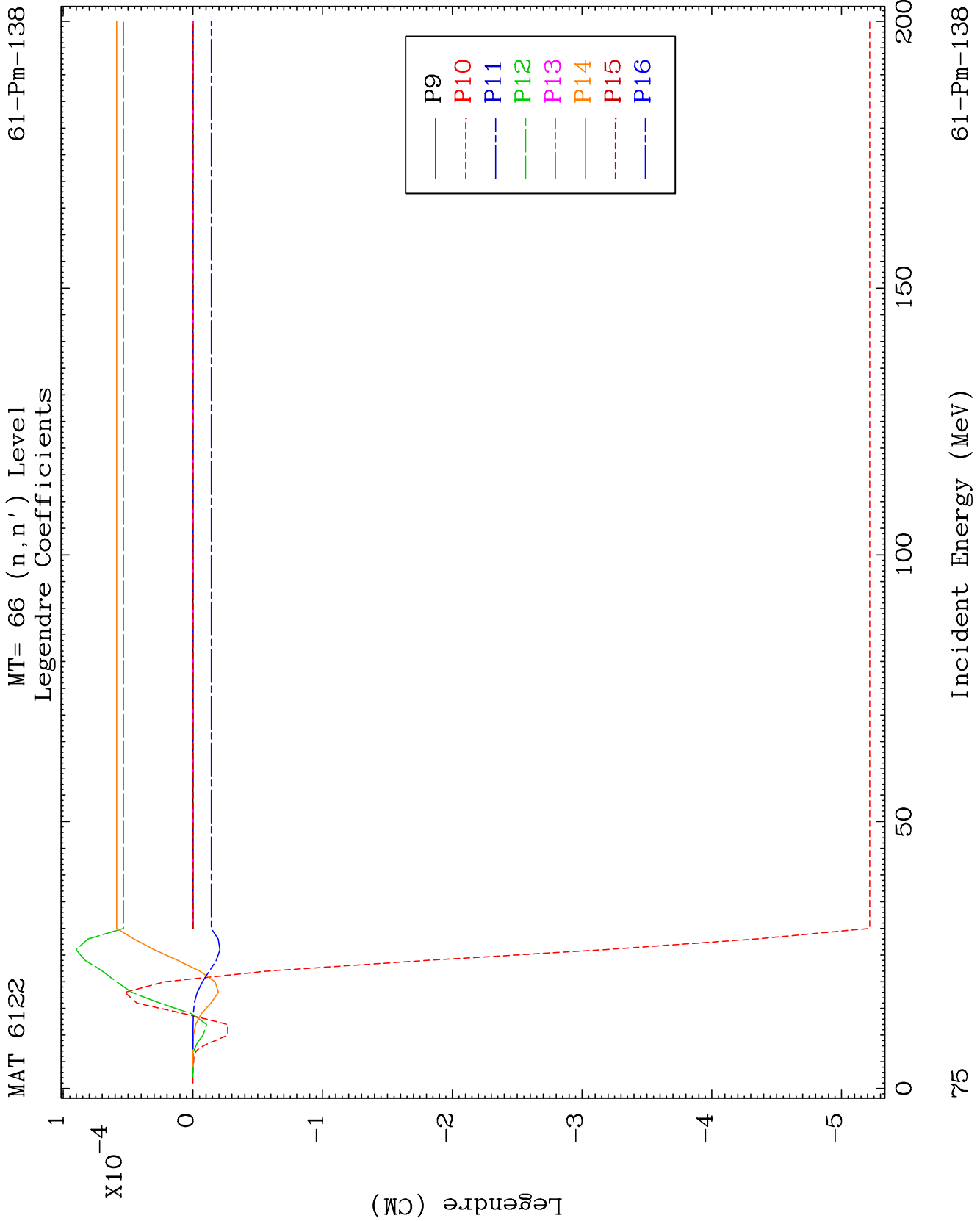


MAT 6122

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

61-Pm-138

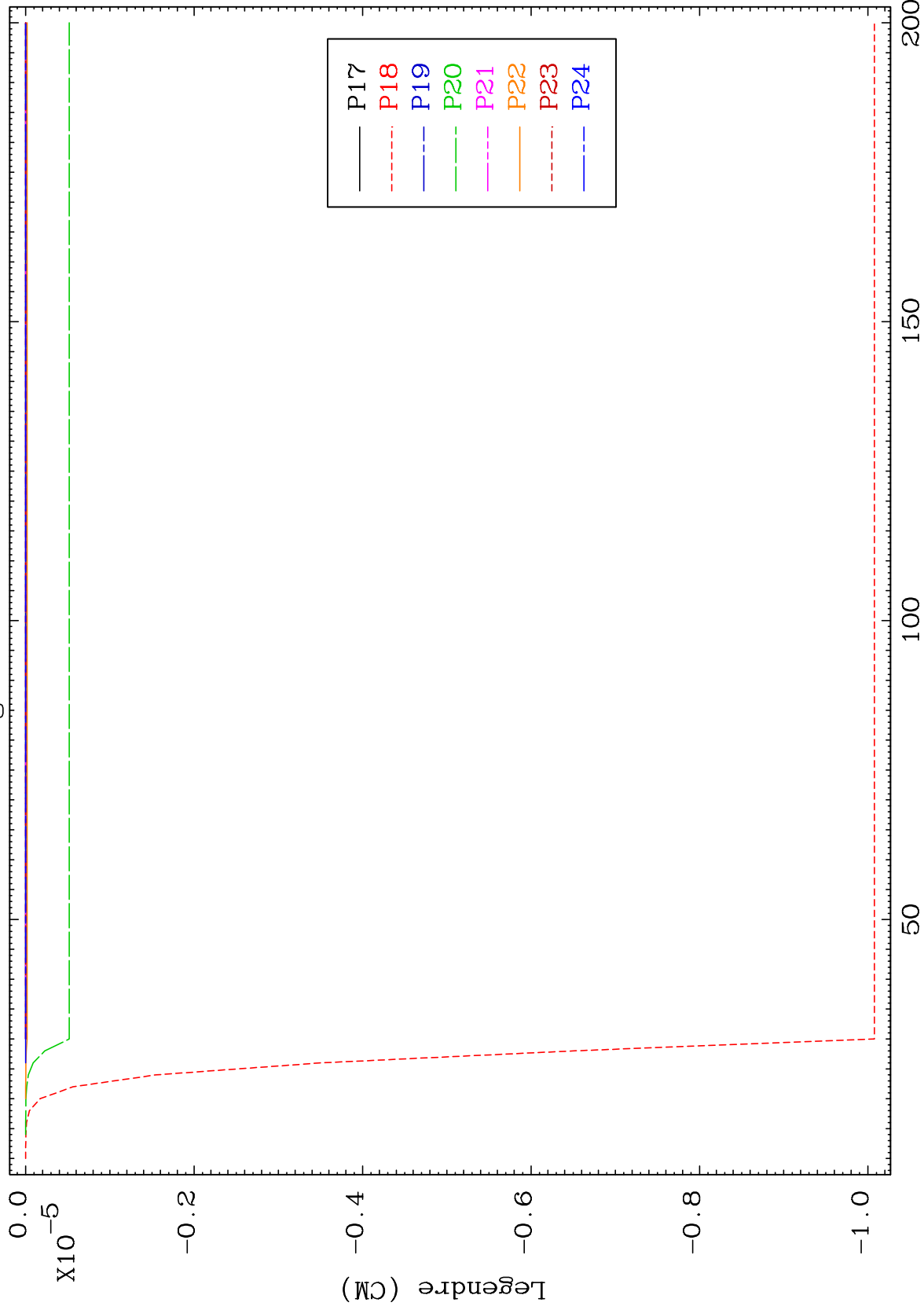




MAT 6122

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

61-Pm-138



61-Pm-138

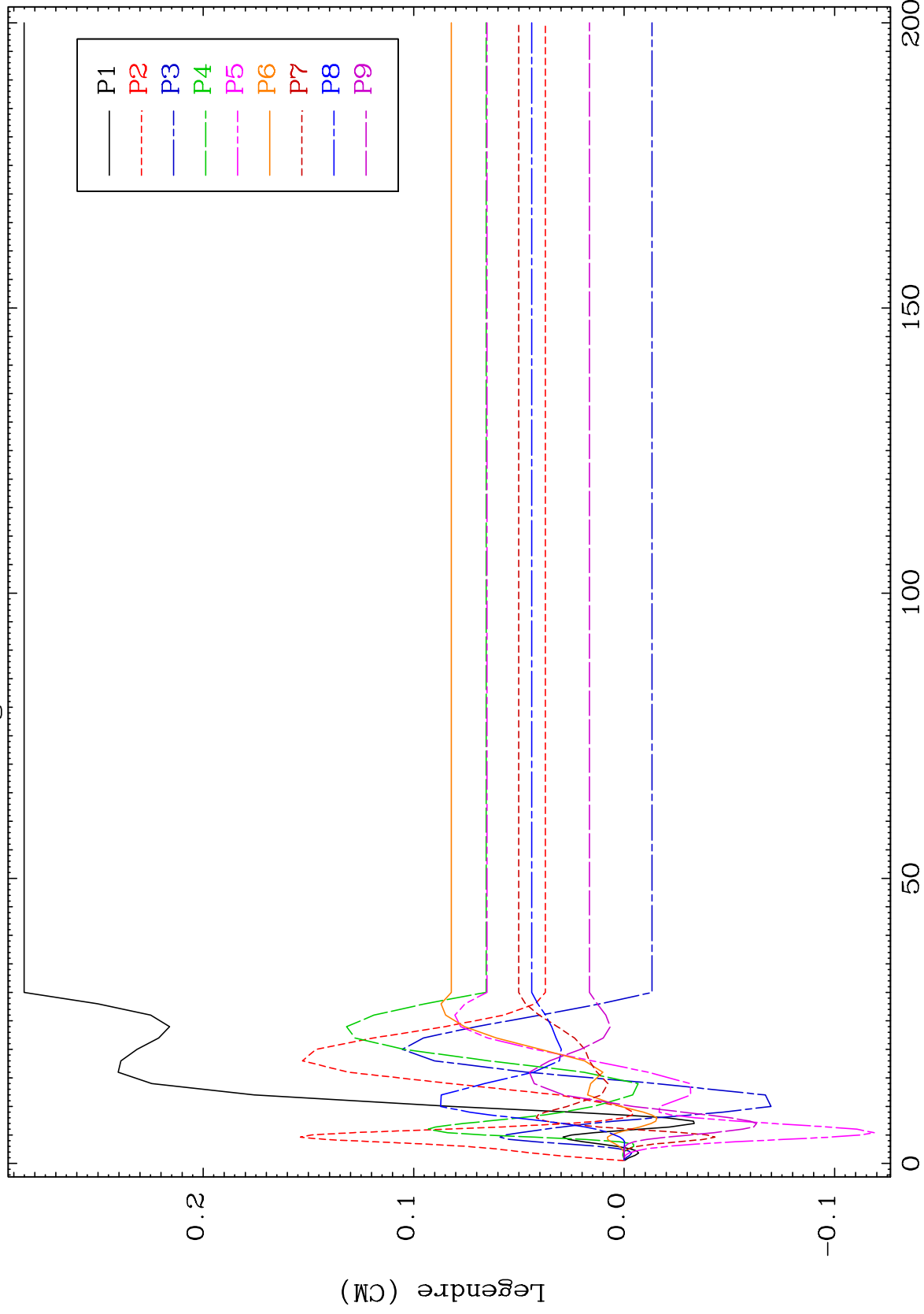
Incident Energy (MeV)

76

MAT 6122

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

61-Pm-138



77

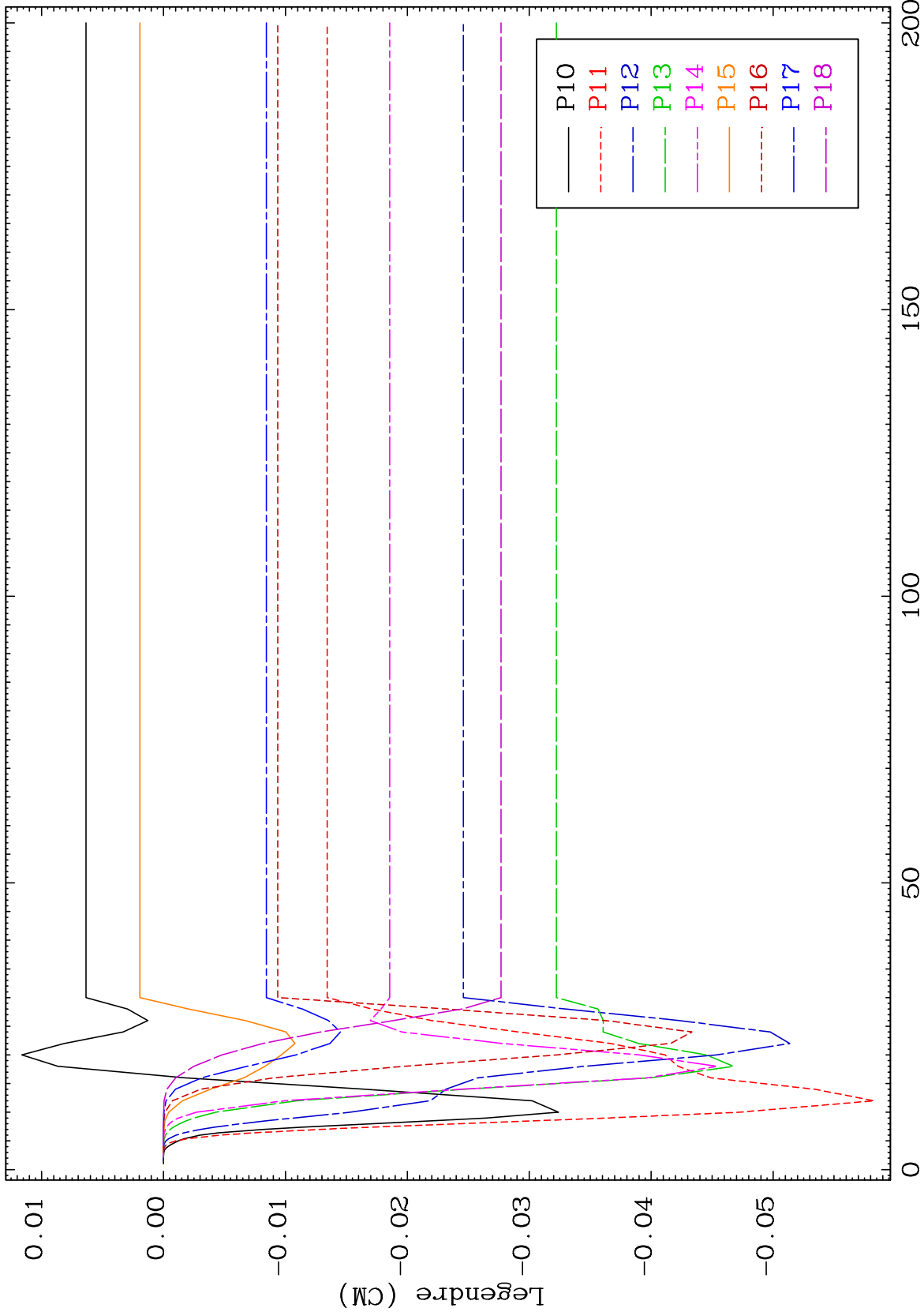
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

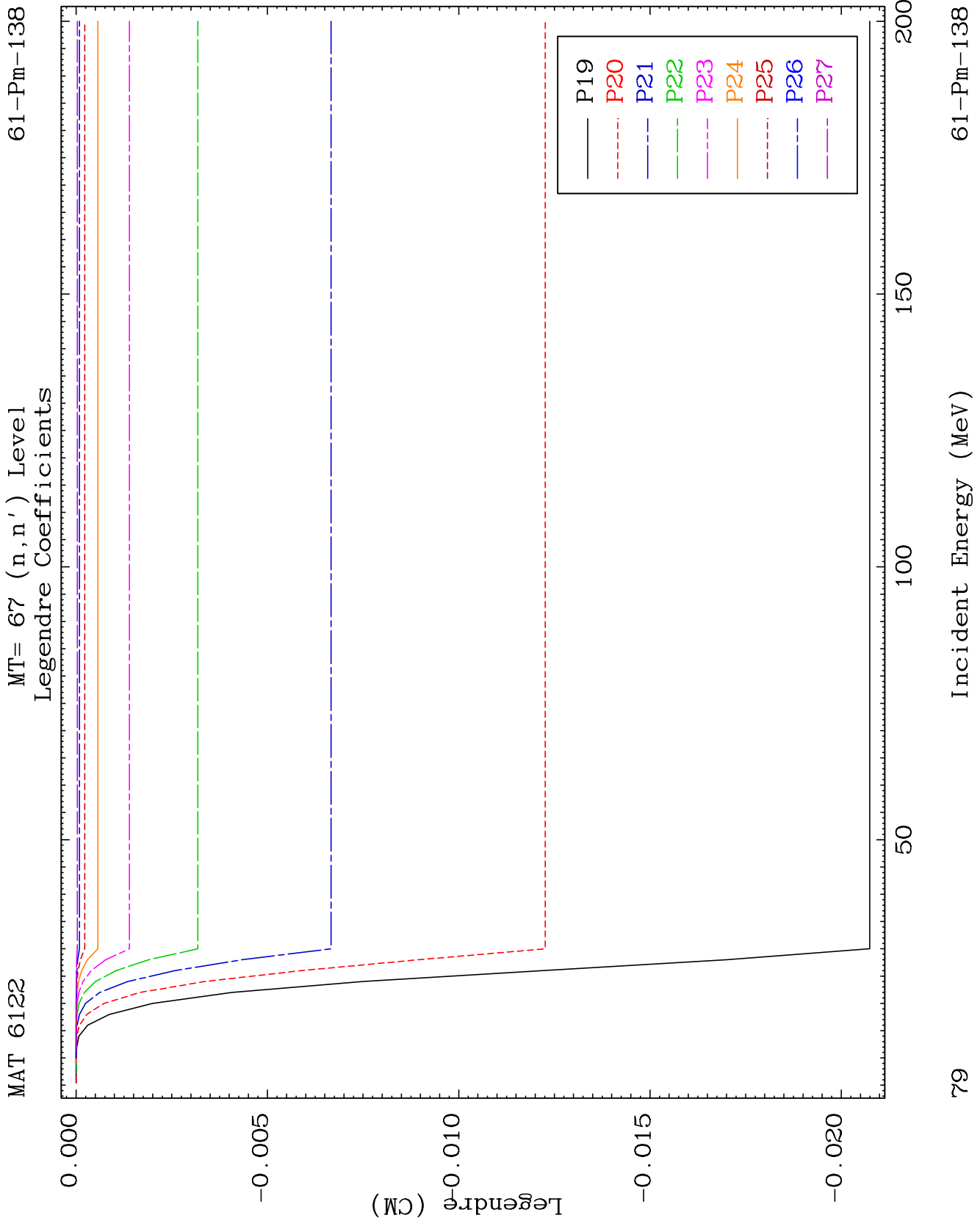
61-Pm-138

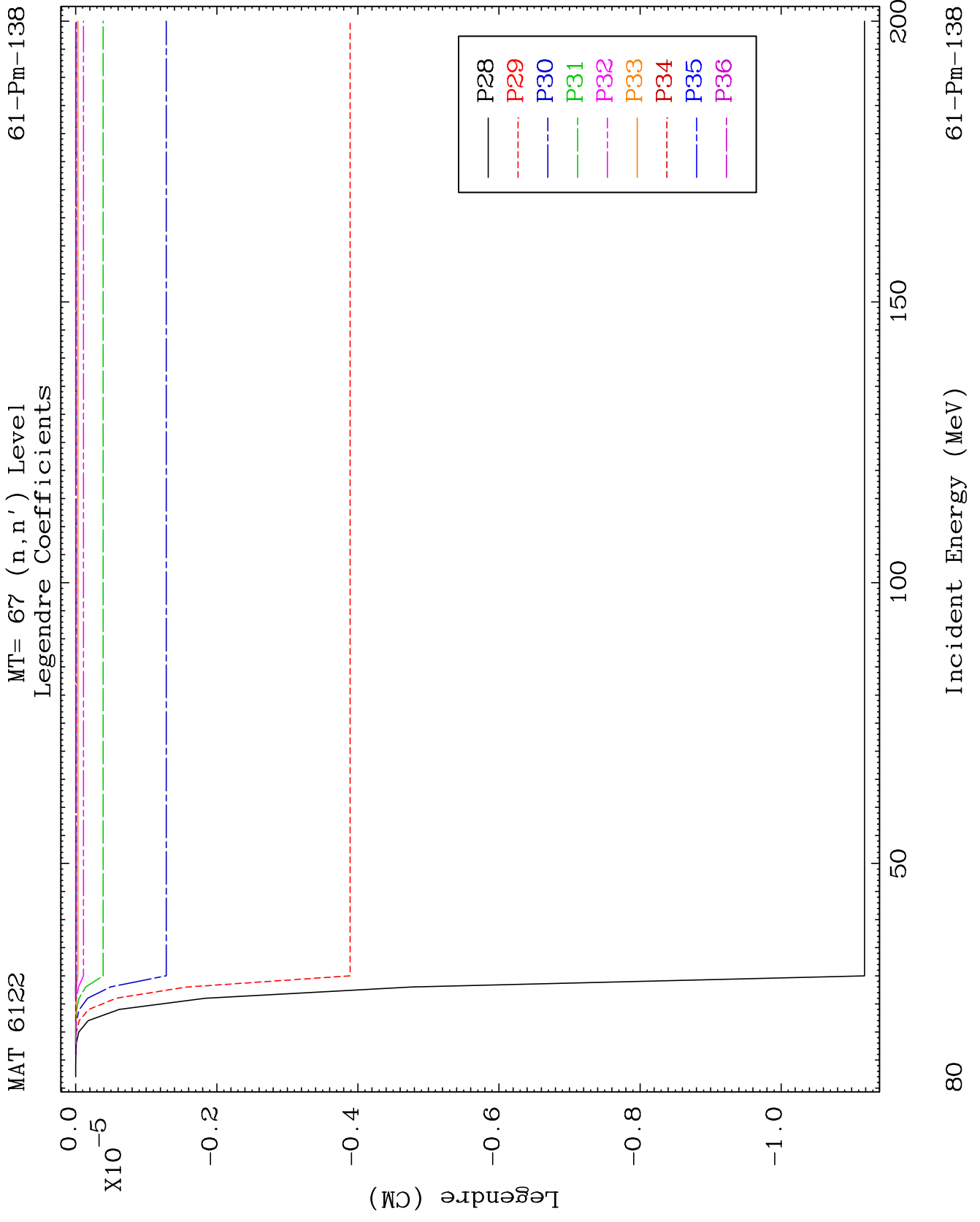


78

Incident Energy (MeV)

61-Pm-138

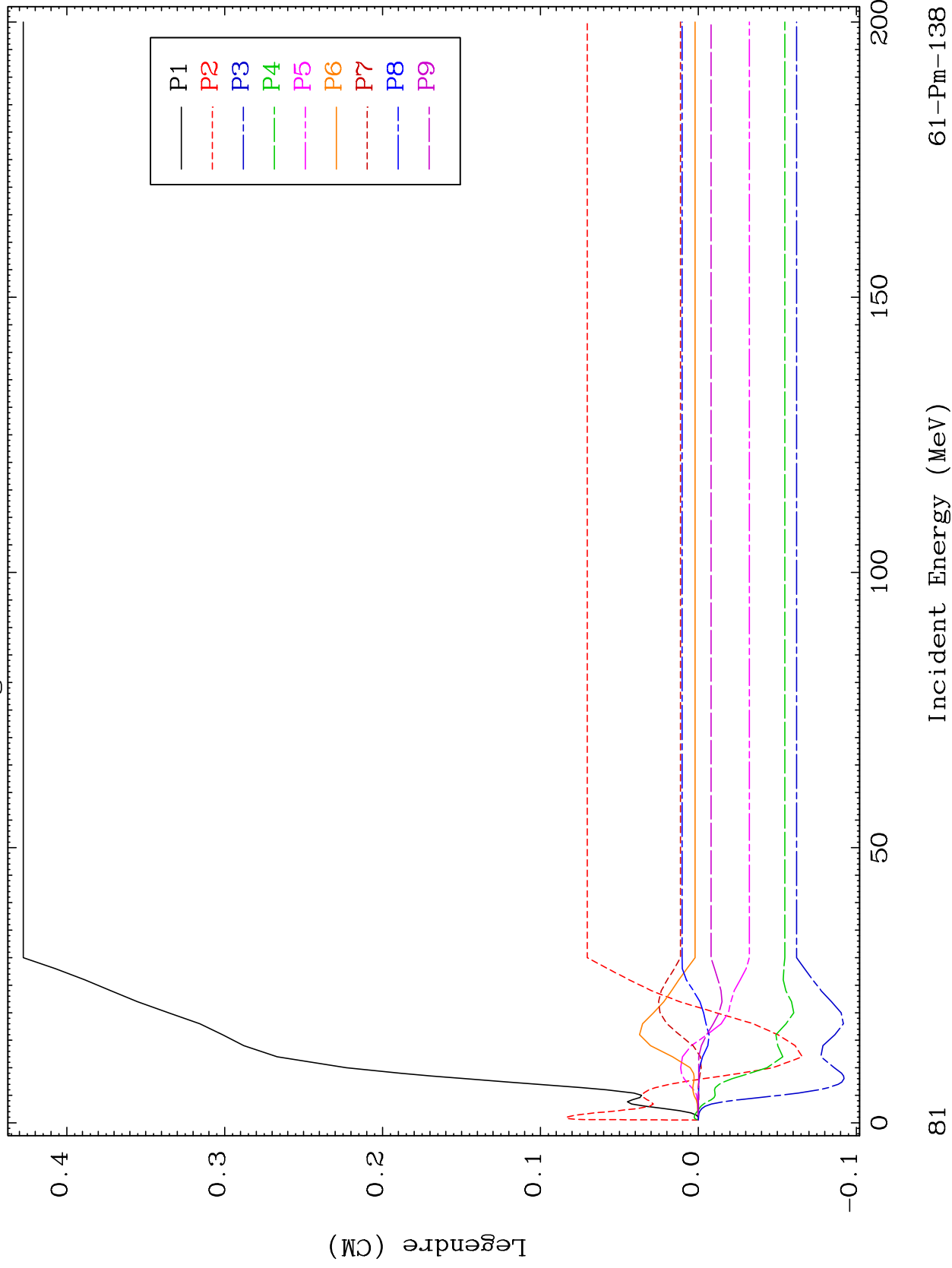




MAT 6122

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

61-Pm-138



61-Pm-138

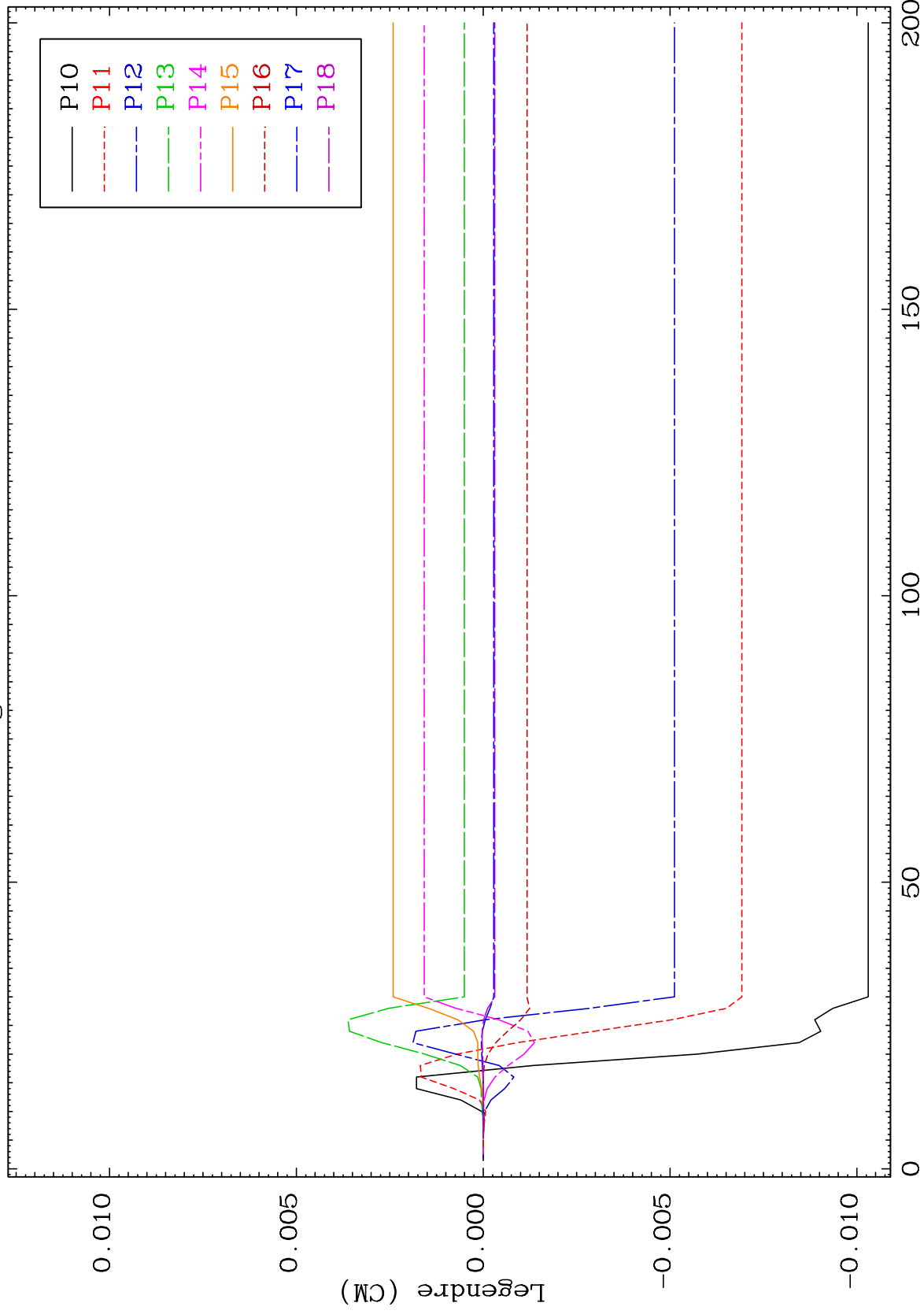
Incident Energy (MeV)

81

MAT 6122

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

61-Pm-138



82

Incident Energy (MeV)

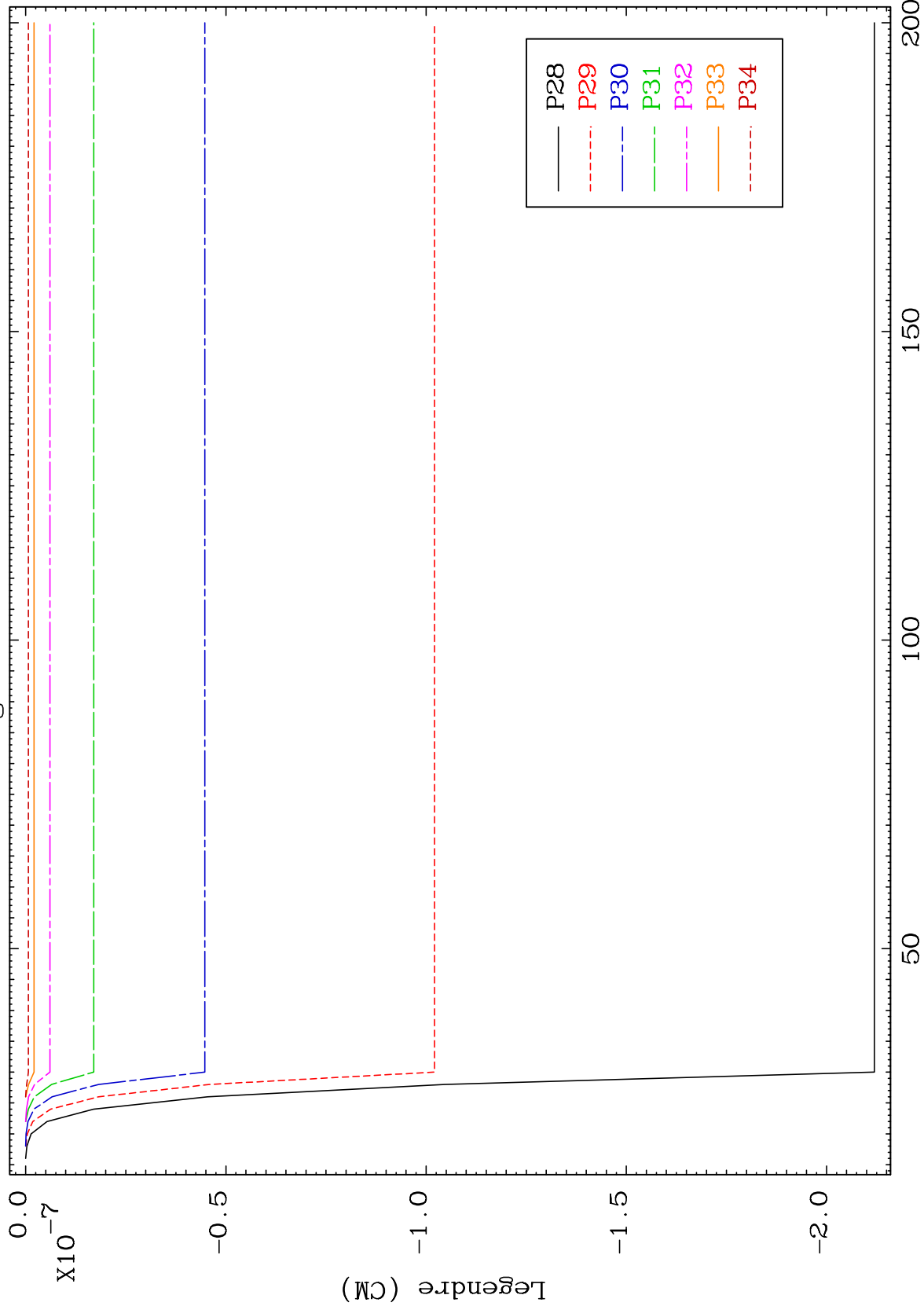
61-Pm-138

MAT 6122

MT= 68 (n,n') Level

61-Pm-138

Legendre Coefficients



61-Pm-138

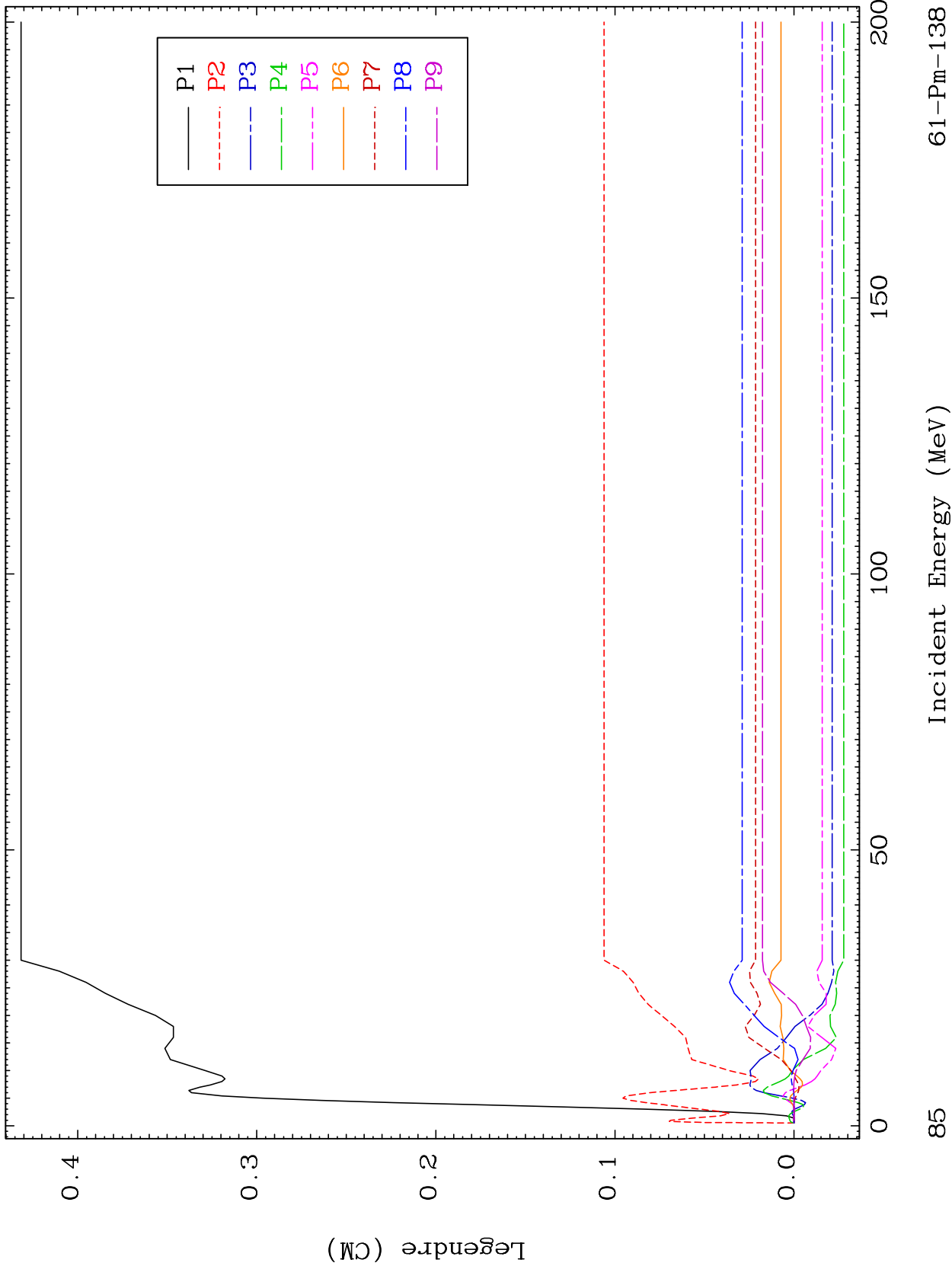
Incident Energy (MeV)

84

MAT 6122

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

61-Pm-138



61-Pm-138

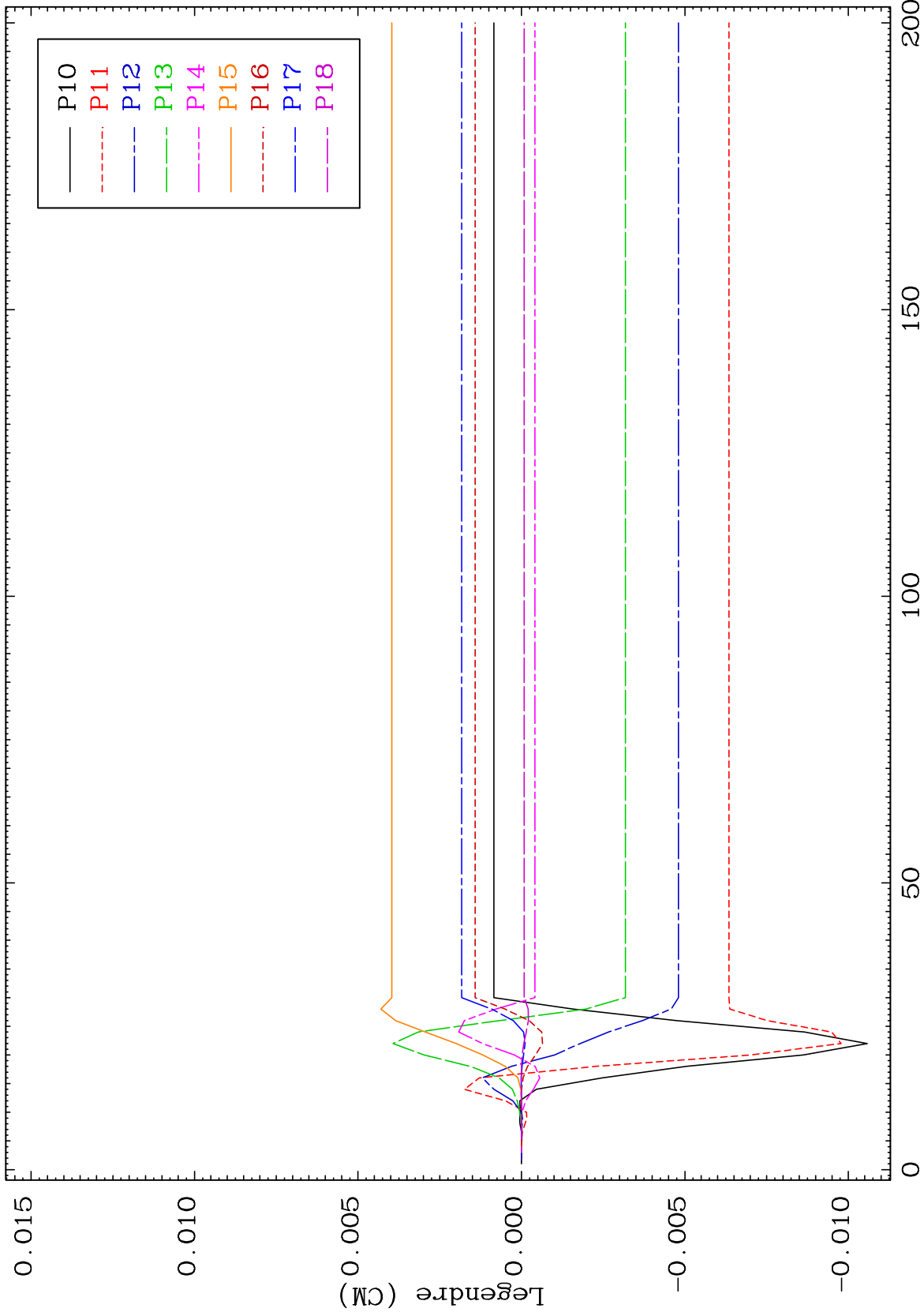
Incident Energy (MeV)

85

MAT 6122

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

61-Pm-138



86

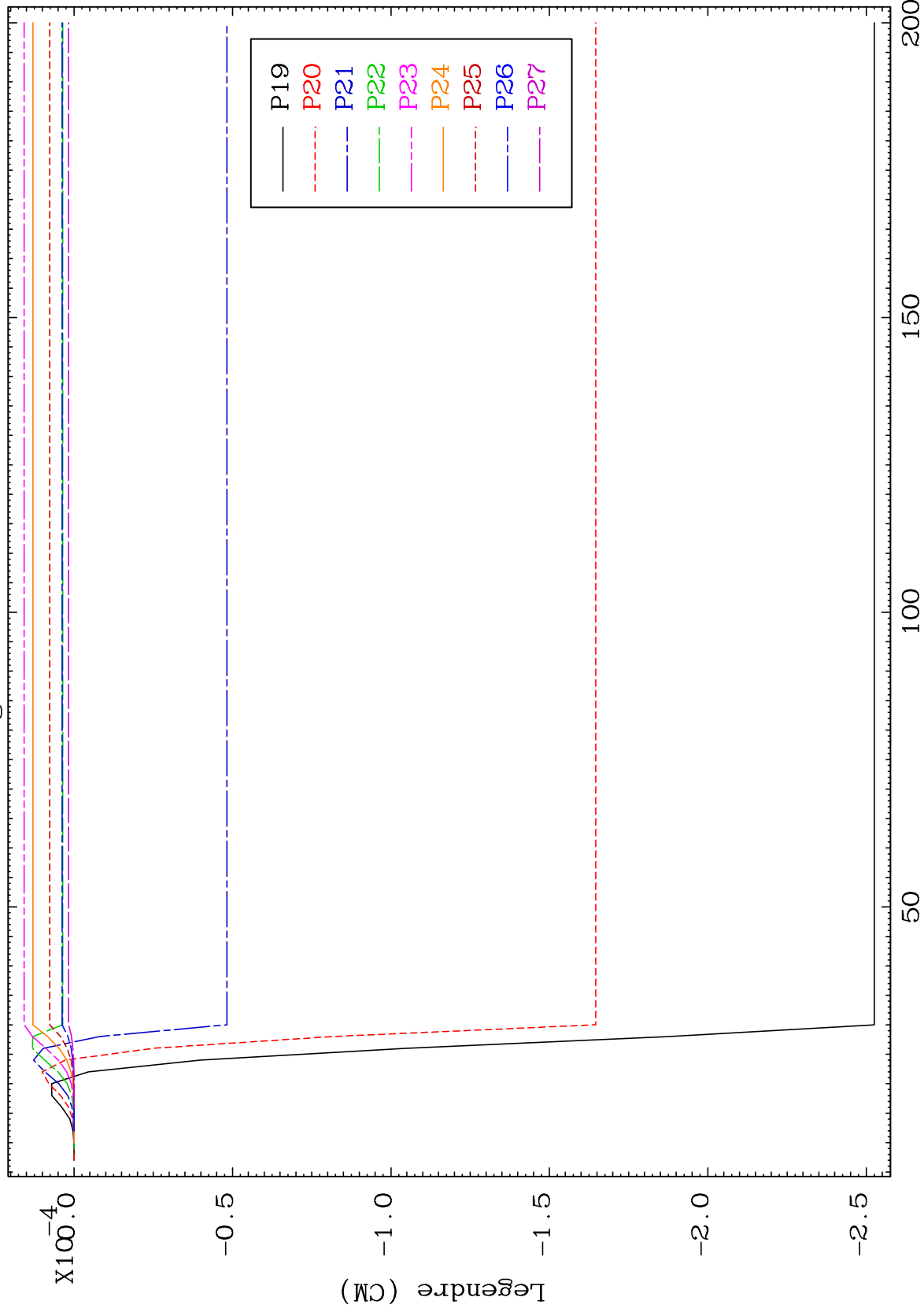
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

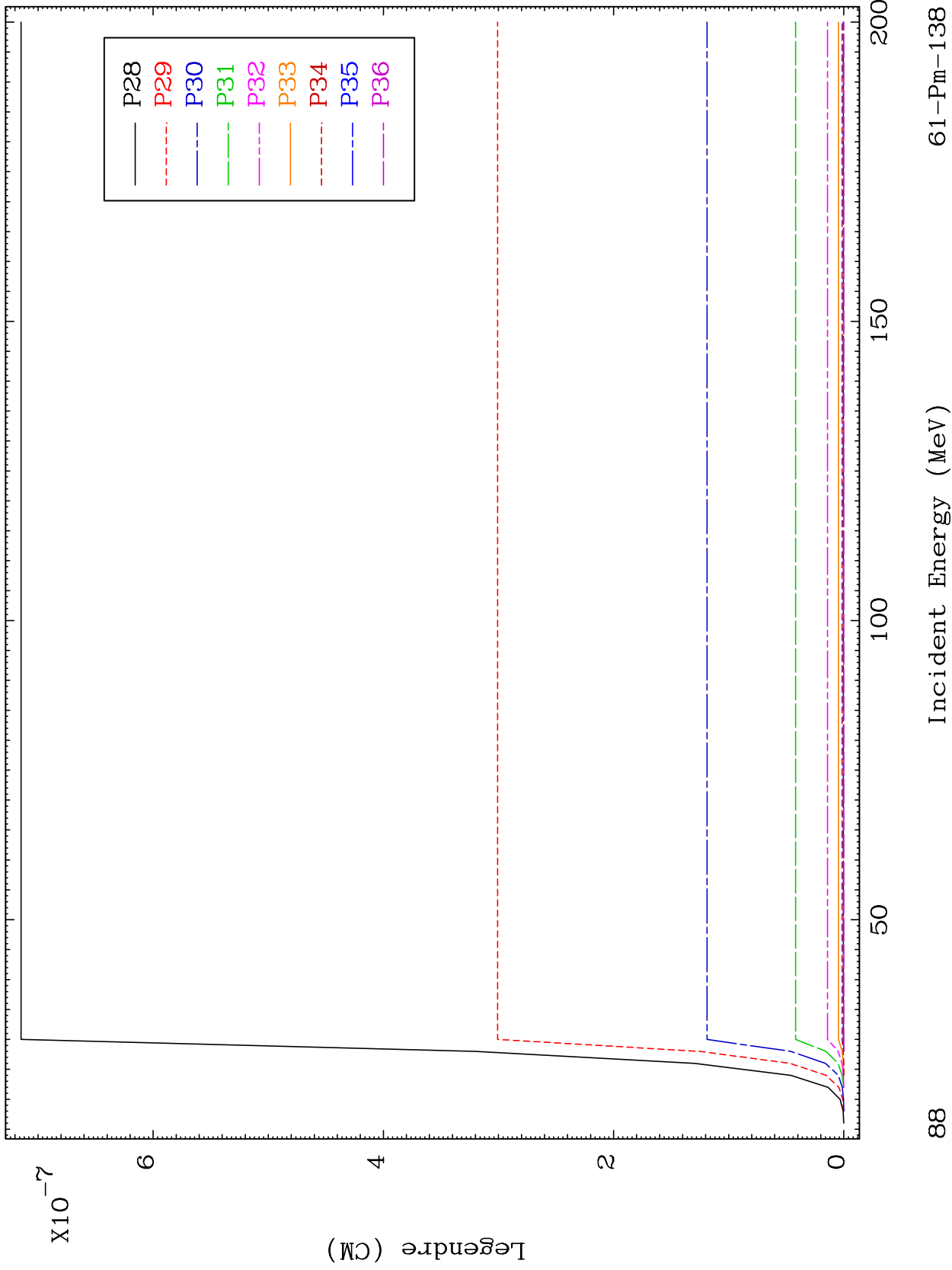
61-Pm-138



MAT 6122

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

61-Pm-138



88

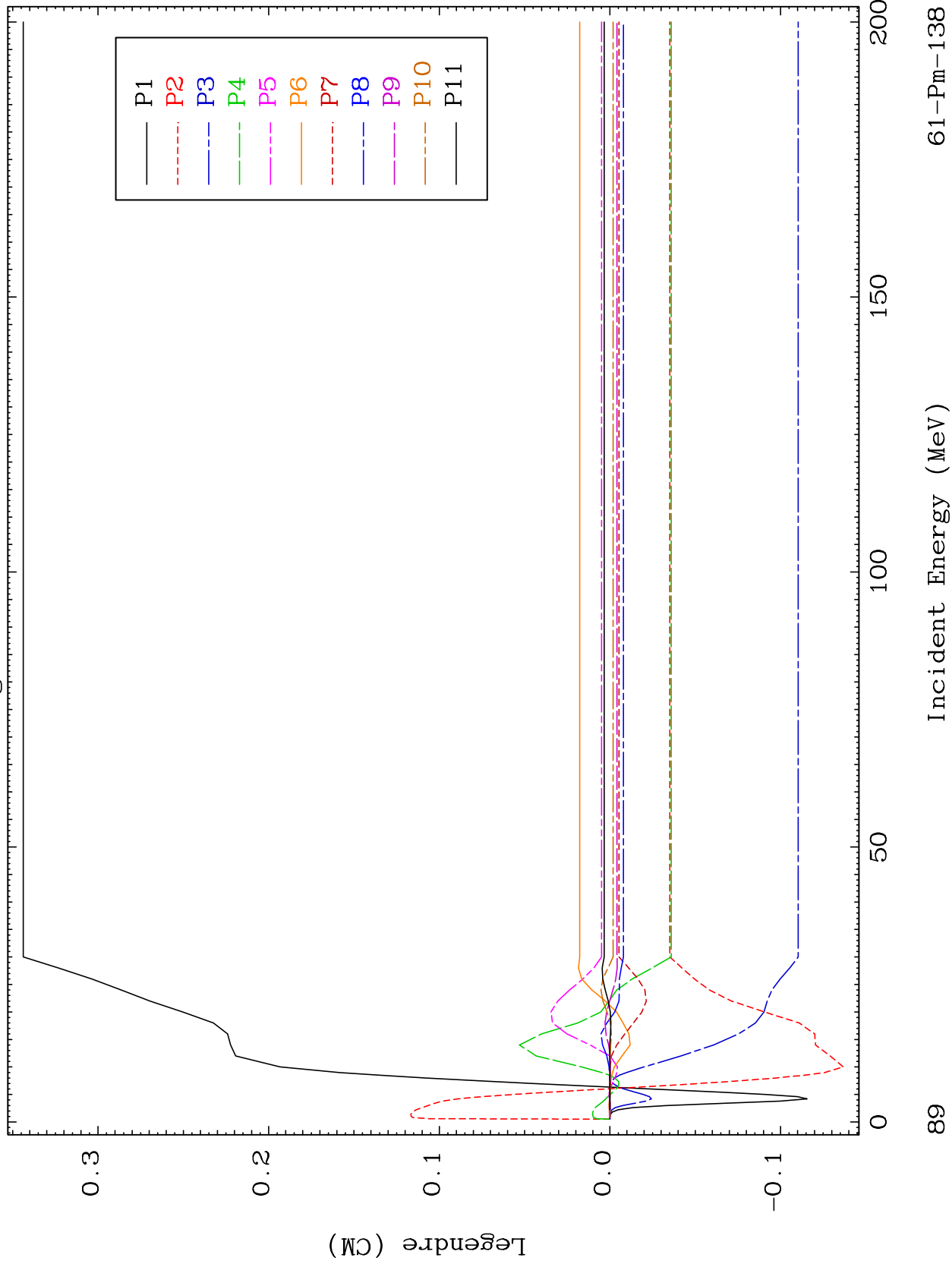
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



61-Pm-138

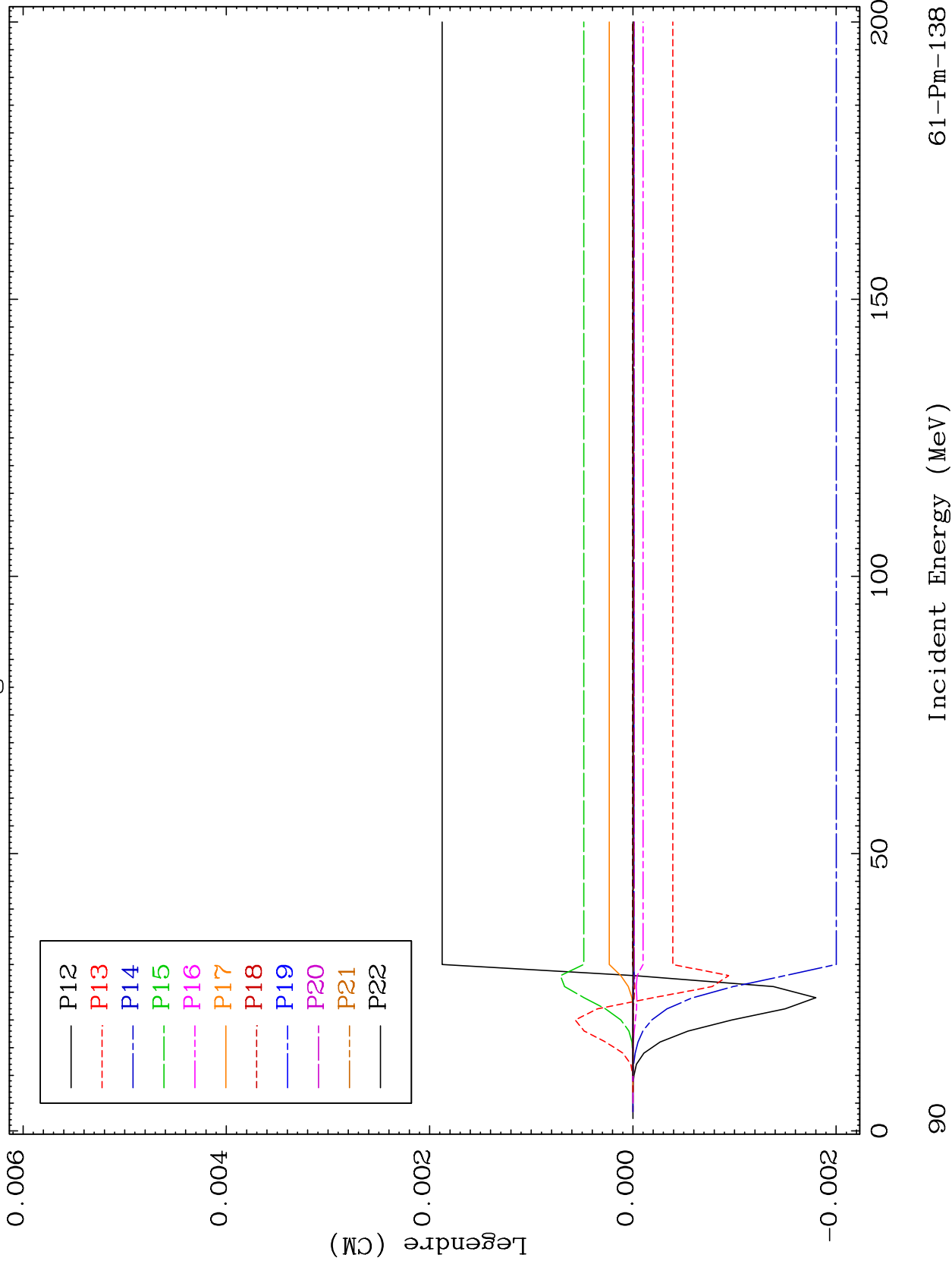
Incident Energy (MeV)

89

MAT 61222

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

61-Pm-138



61-Pm-138

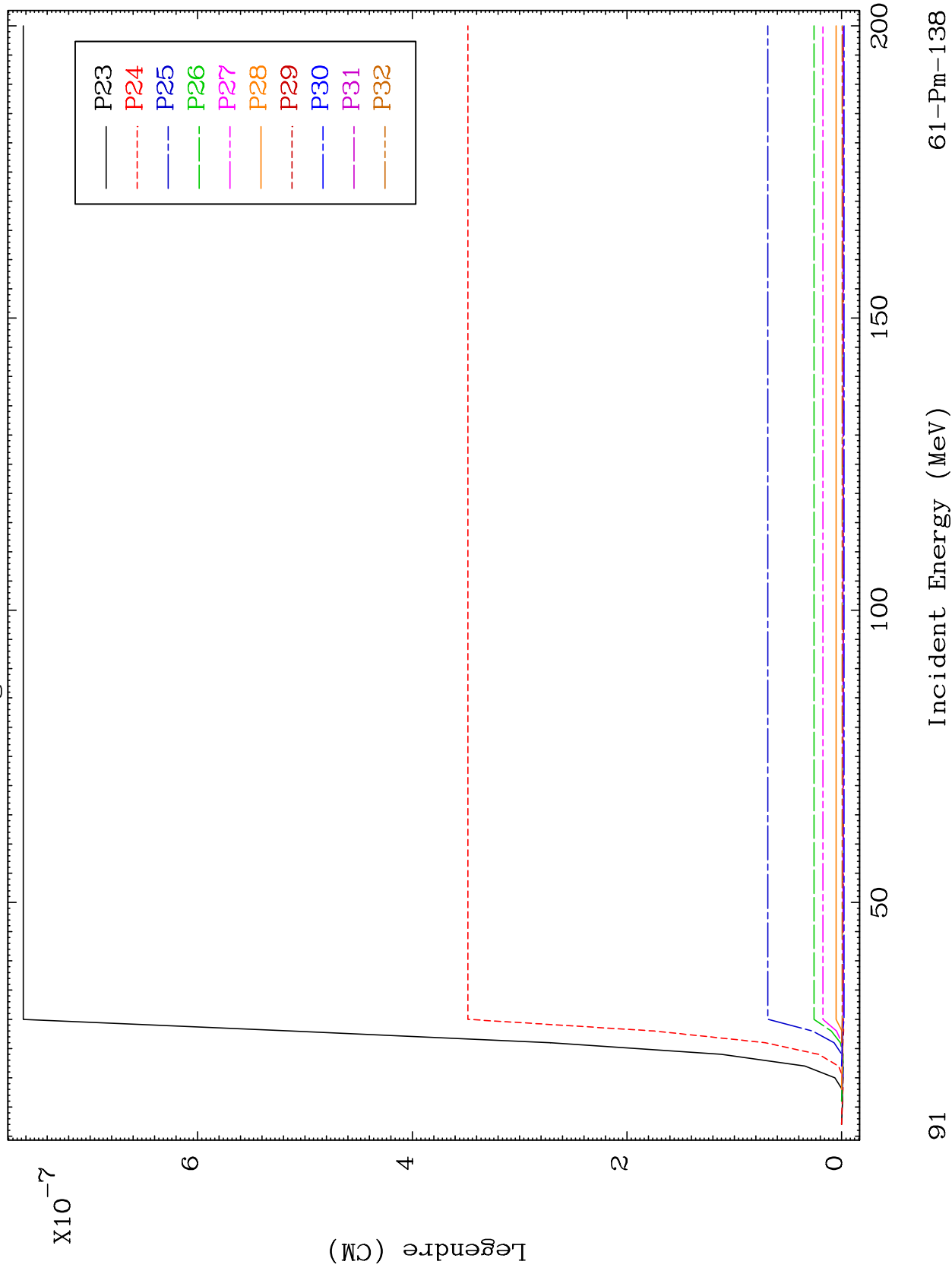
Incident Energy (MeV)

90

MAT 6122

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

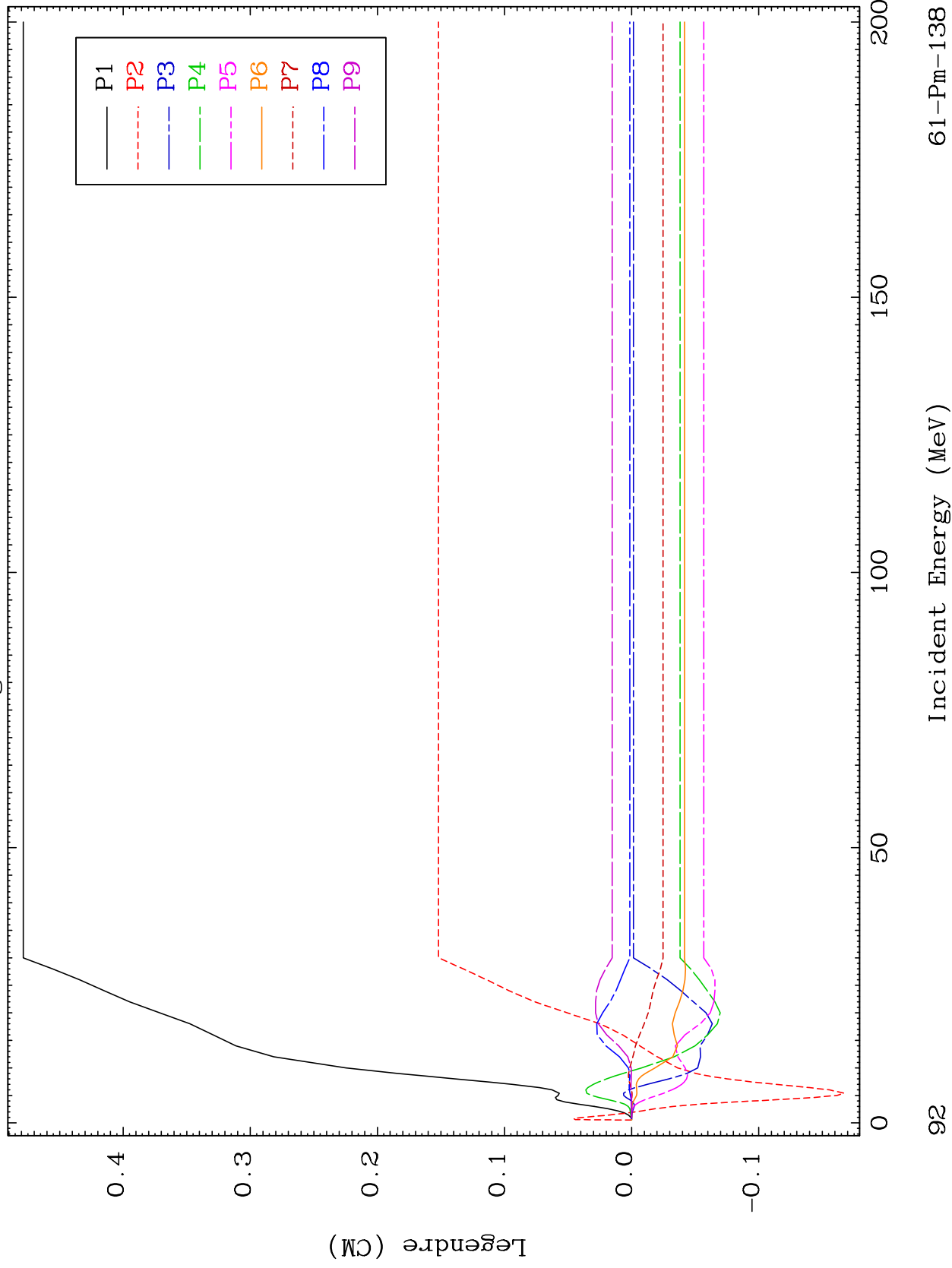
61-Pm-138



MAT 6122

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

61-Pm-138



61-Pm-138

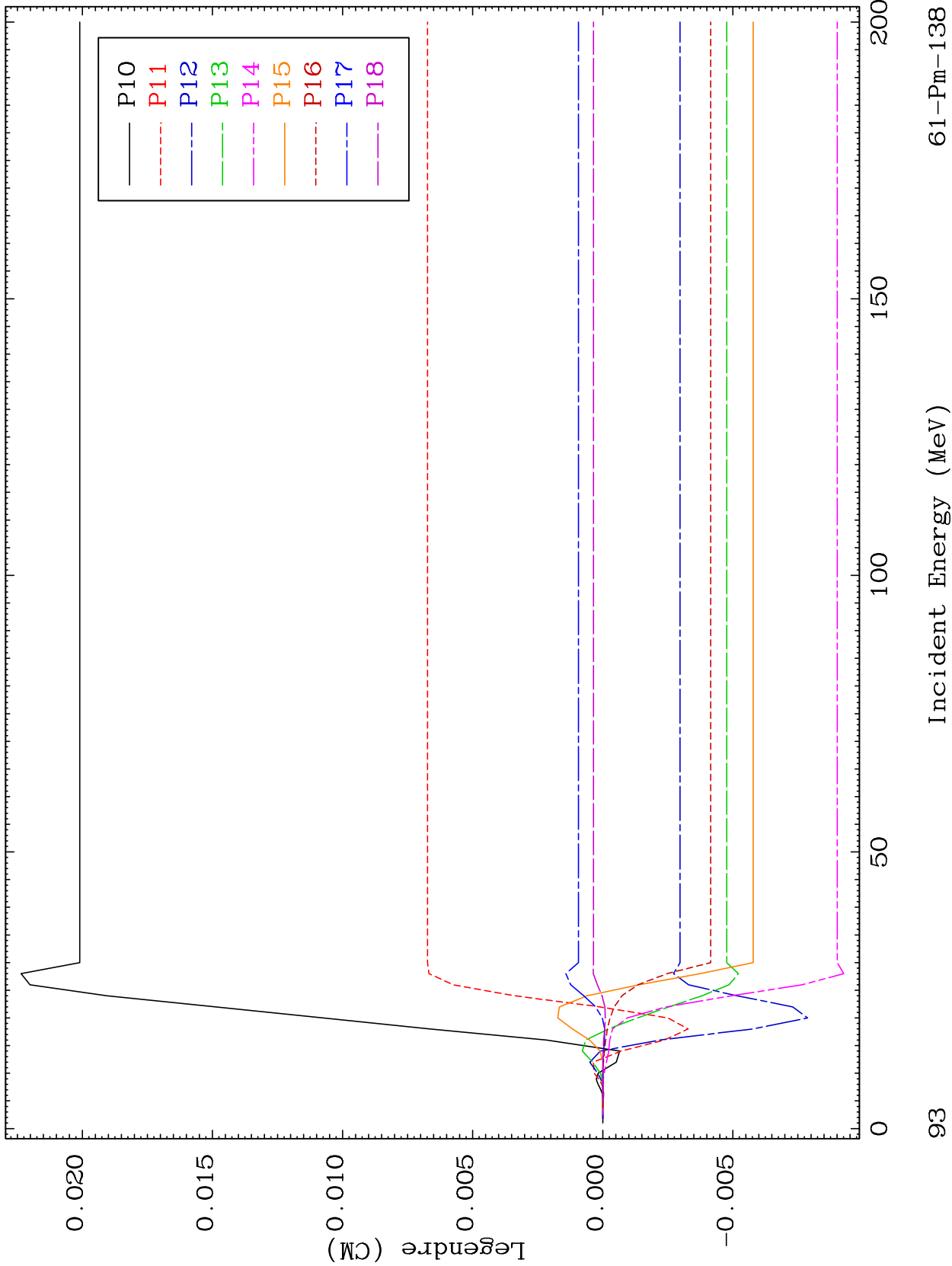
Incident Energy (MeV)

92

MAT 6122

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

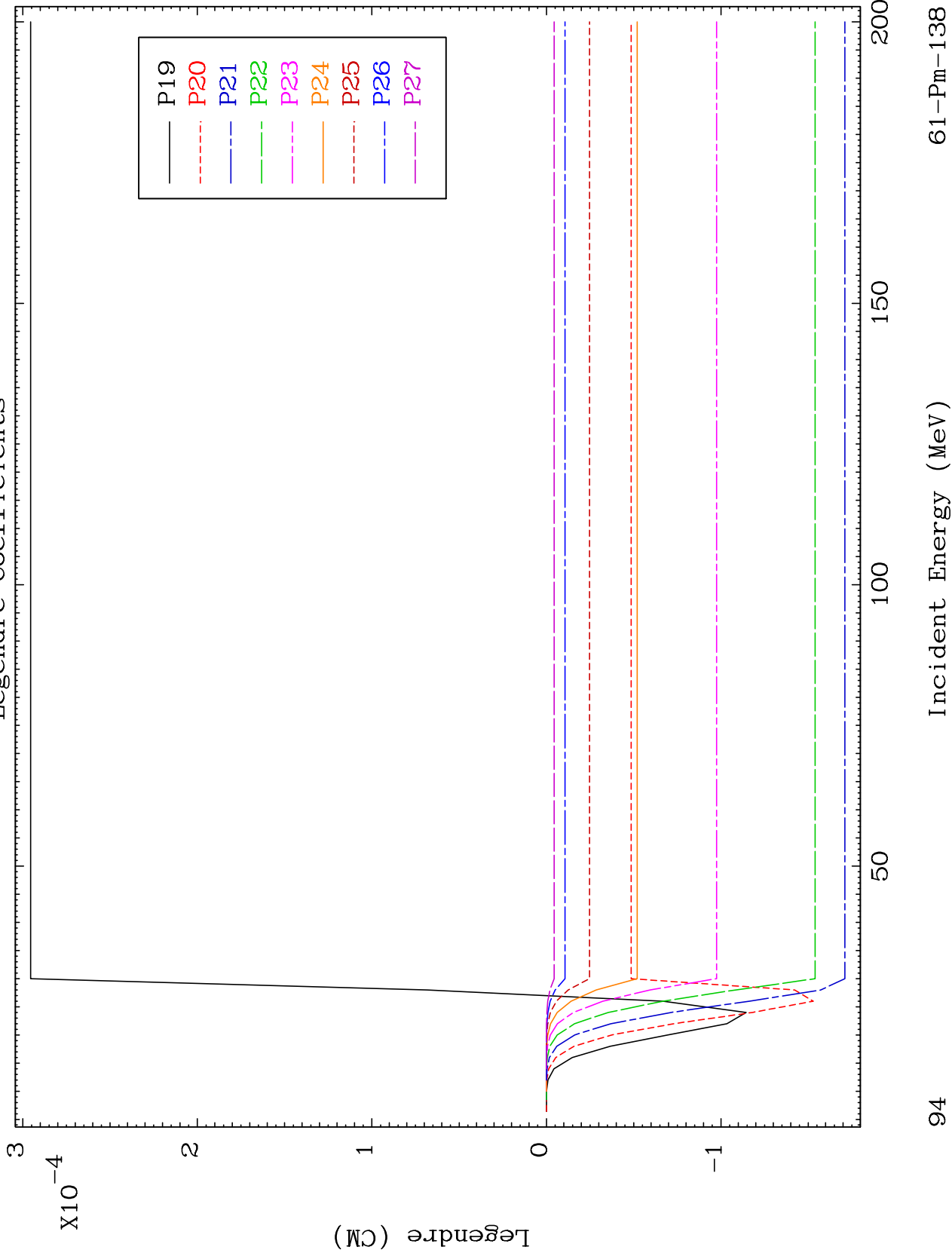
61-Pm-138



93

Incident Energy (MeV)

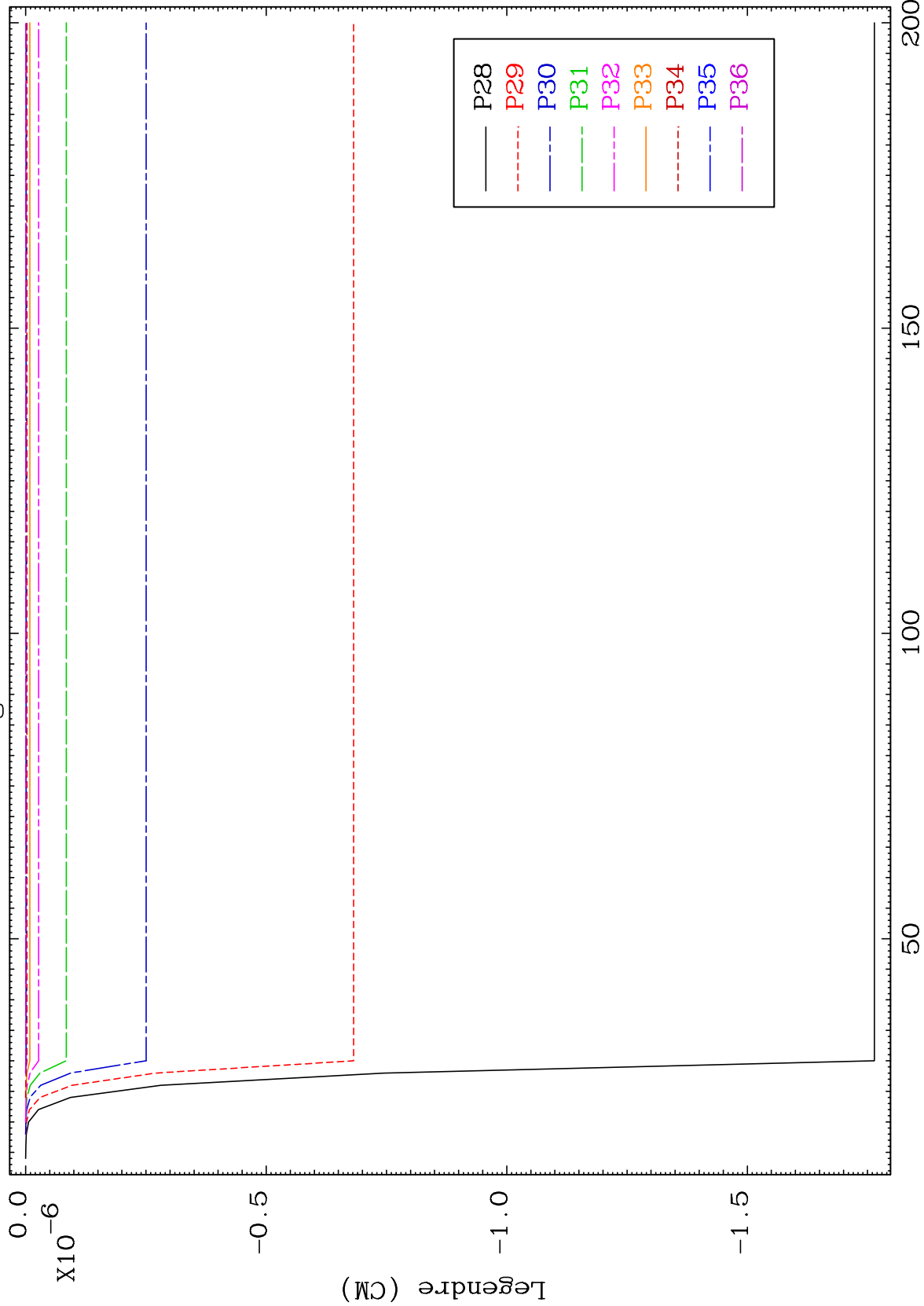
61-Pm-138



MAT 6122

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

61-Pm-138



61-Pm-138

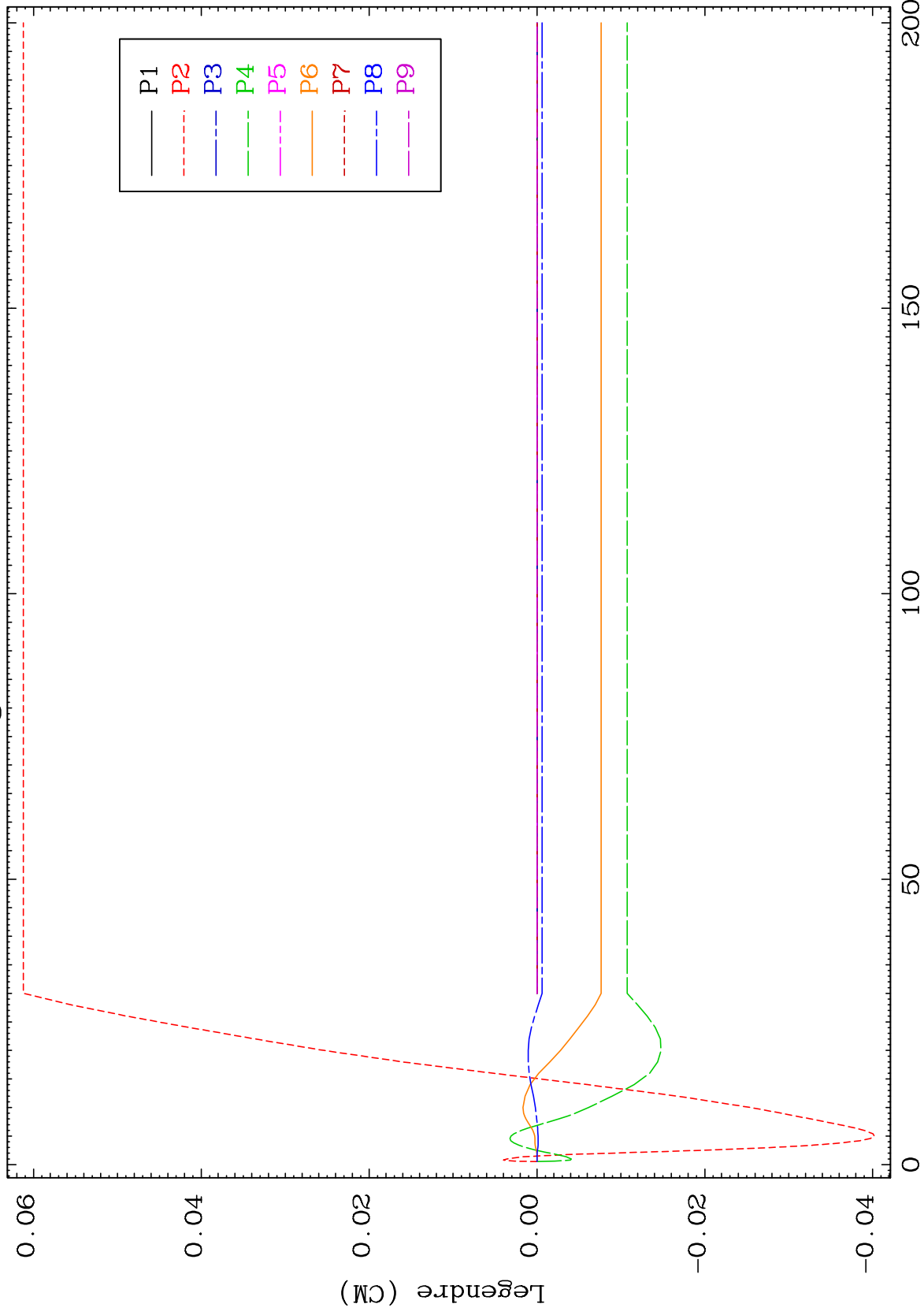
Incident Energy (MeV)

95

MAT 61222

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

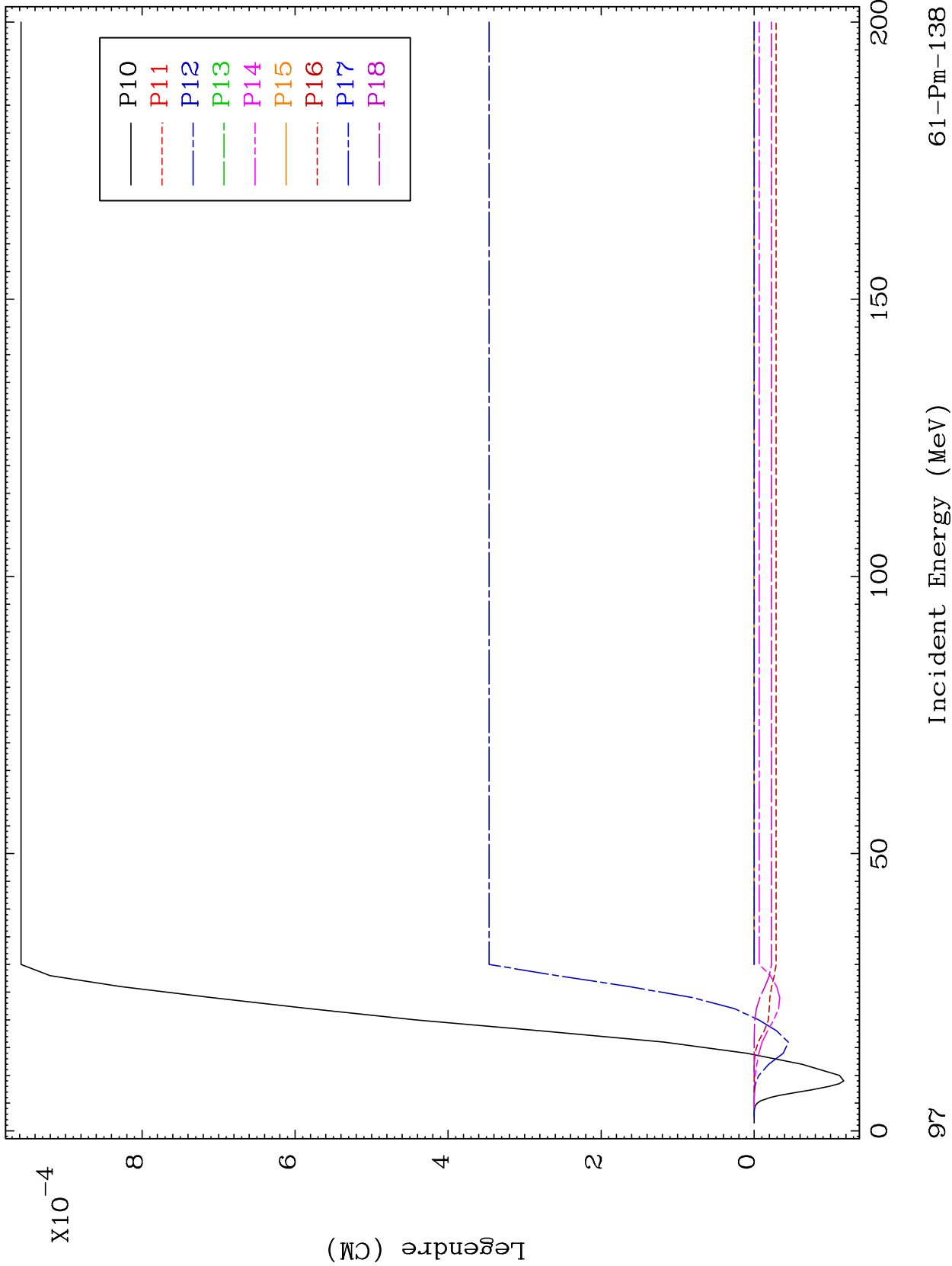
61-Pm-138

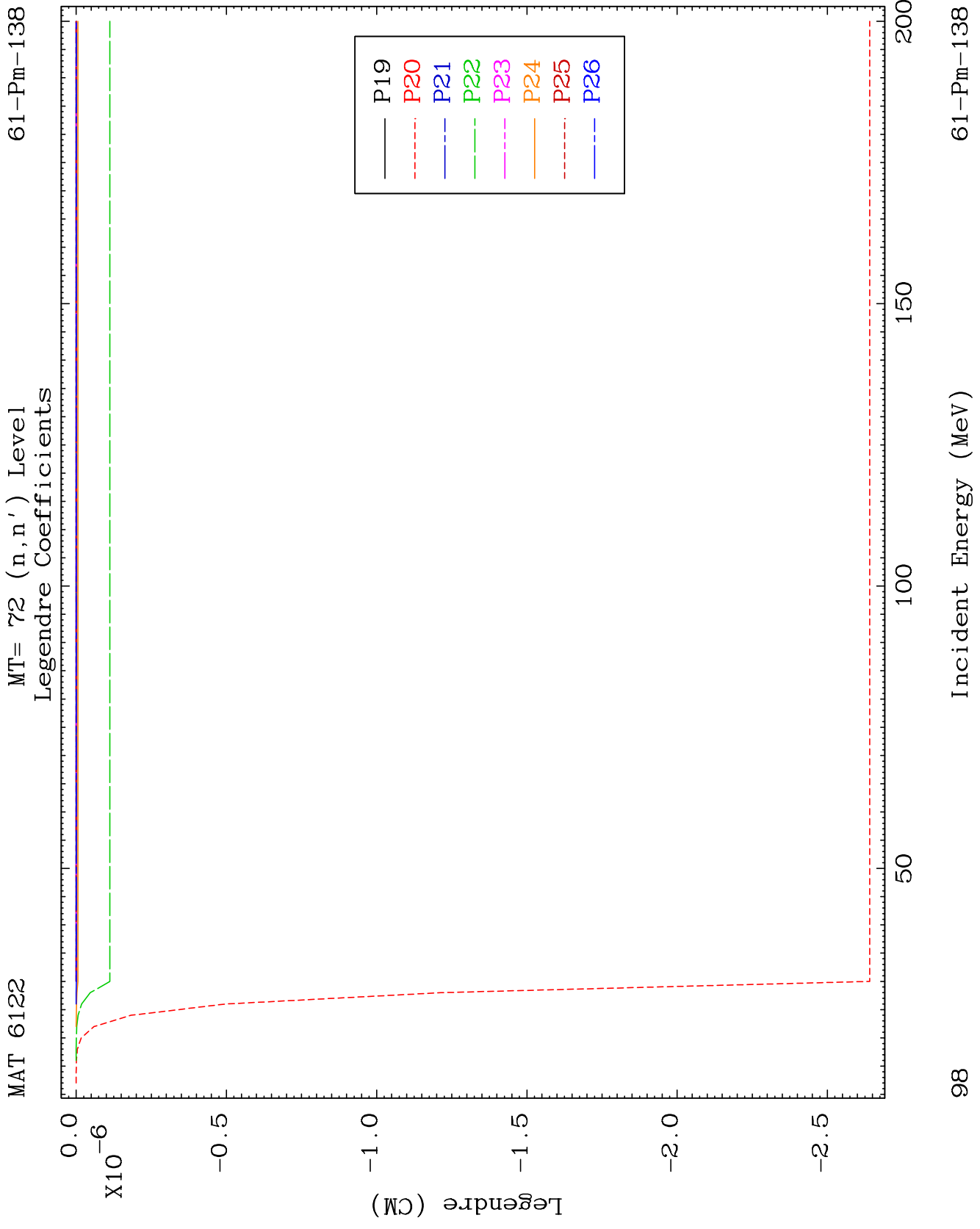


96

Incident Energy (MeV)

61-Pm-138

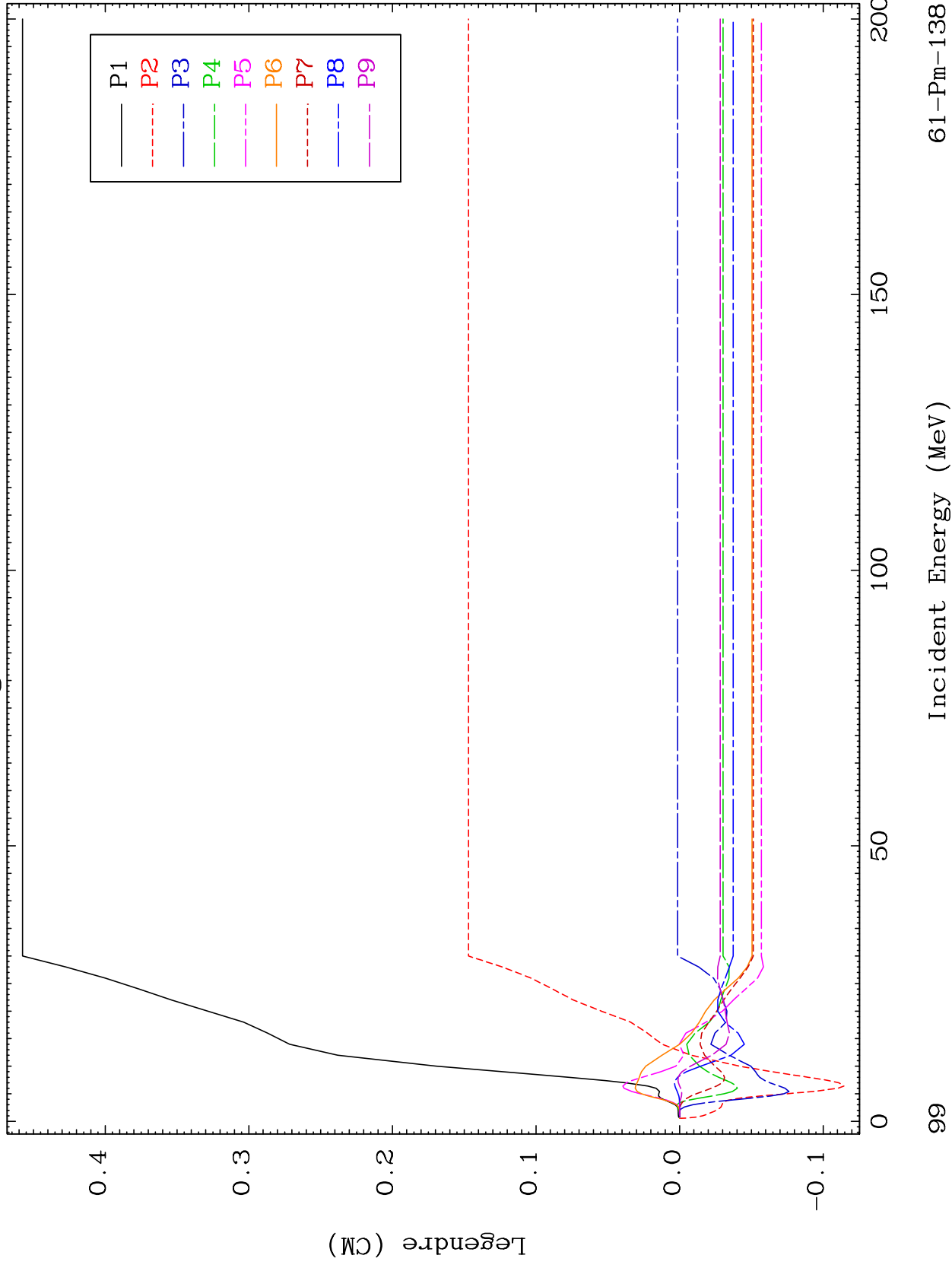




MAT 6122

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

61-Pm-138



61-Pm-138

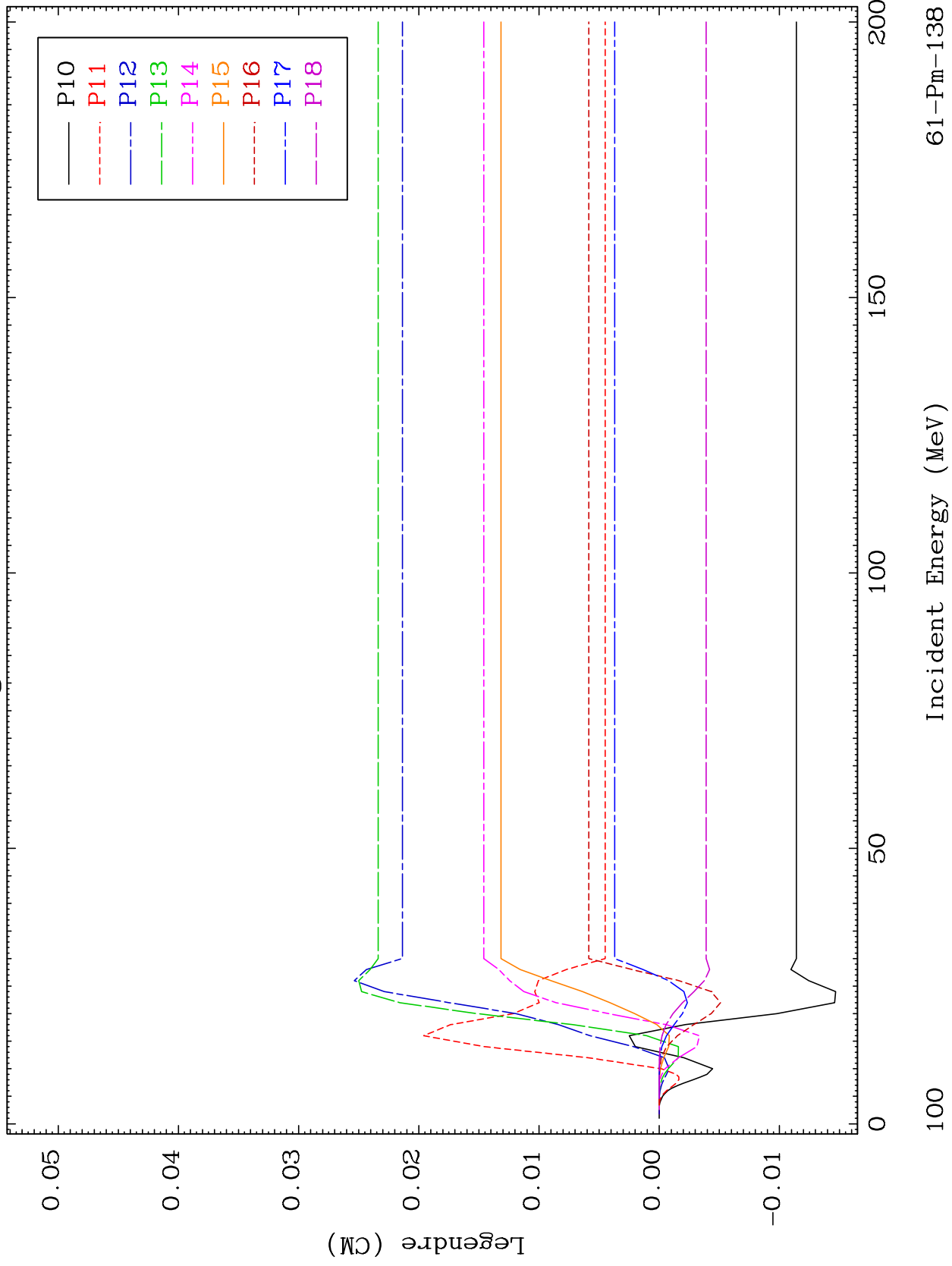
Incident Energy (MeV)

99

MAT 6122

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

61-Pm-138



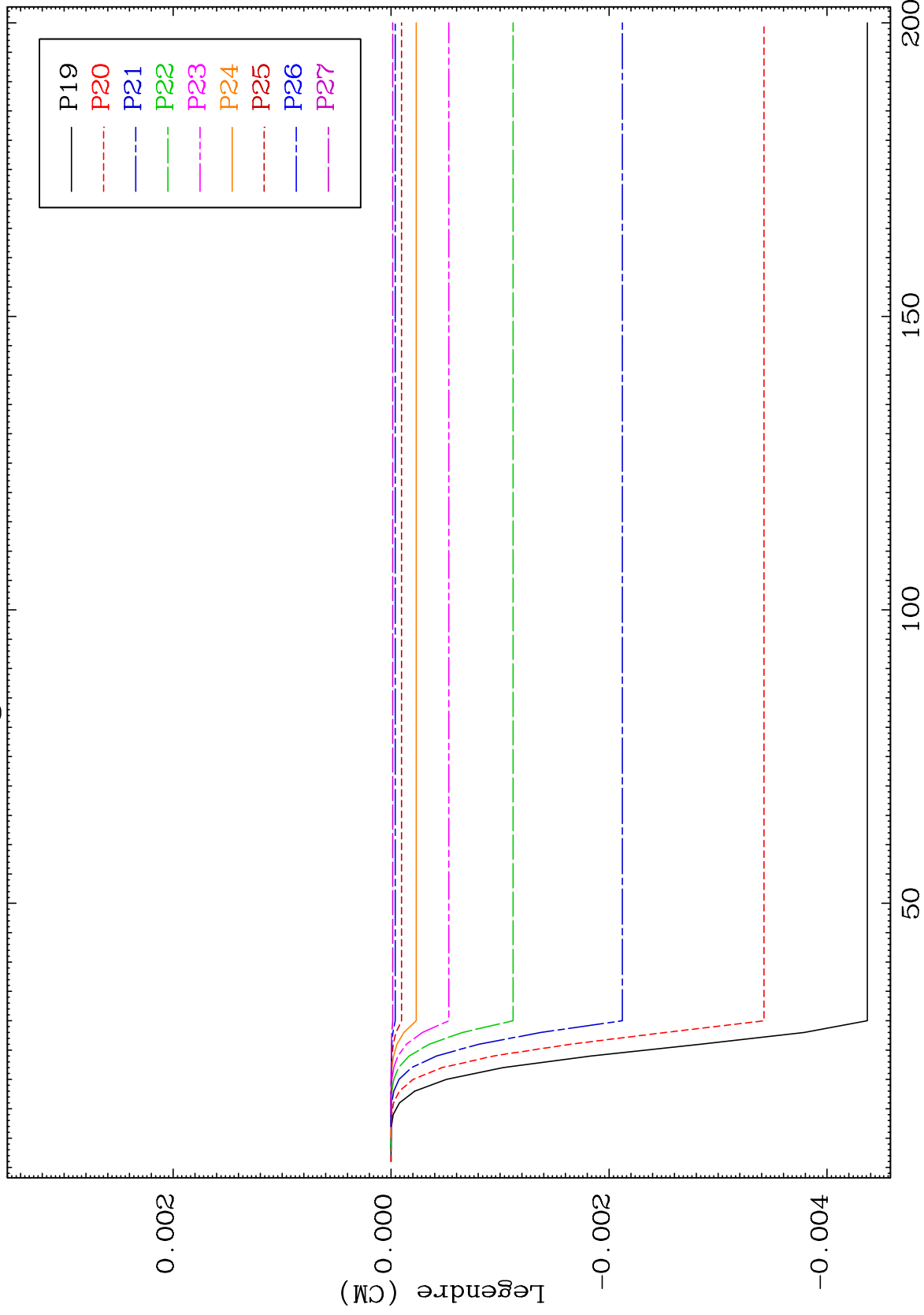
61-Pm-138

Incident Energy (MeV)

MAT 6122

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

61-Pm-138



101

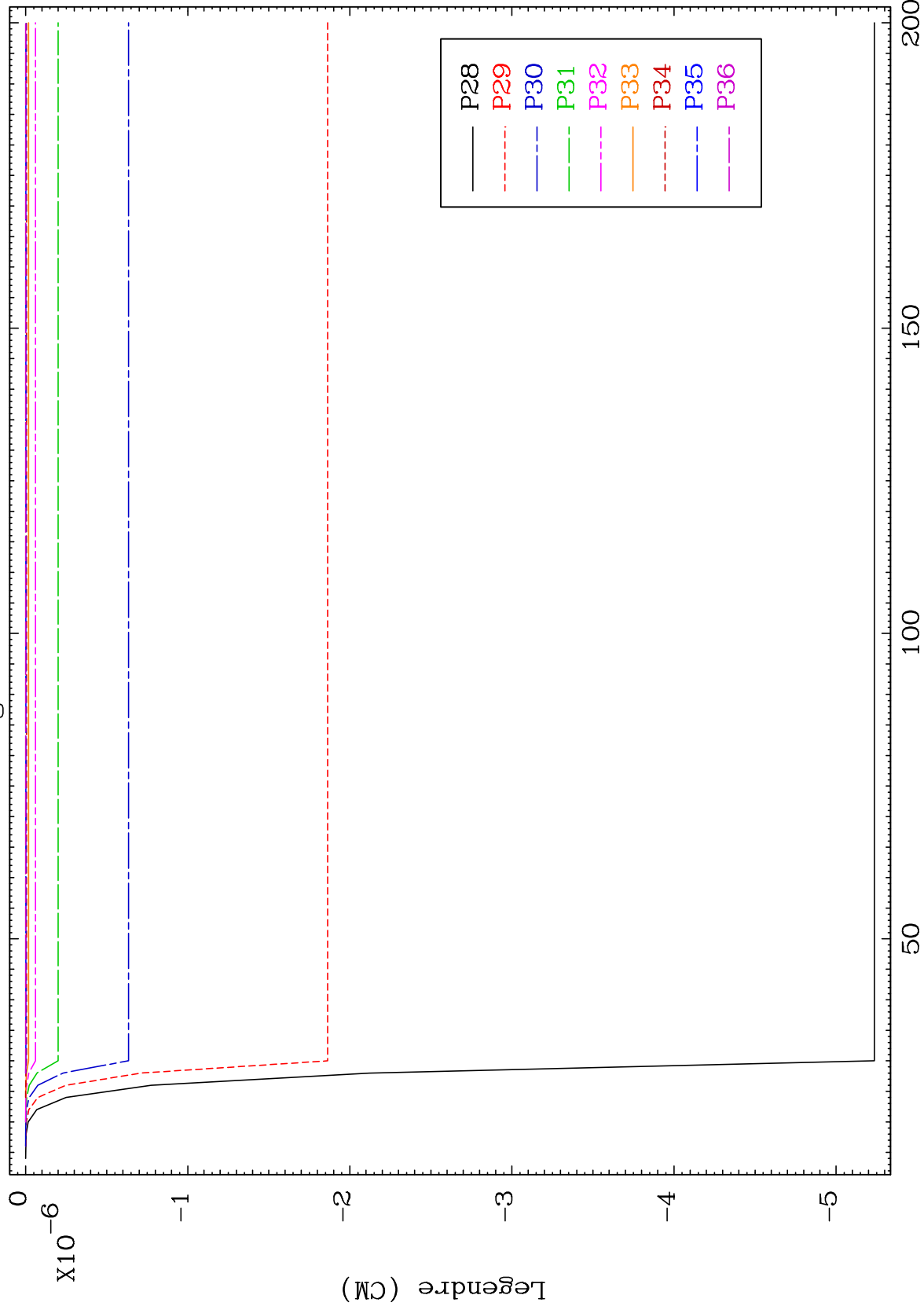
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



102

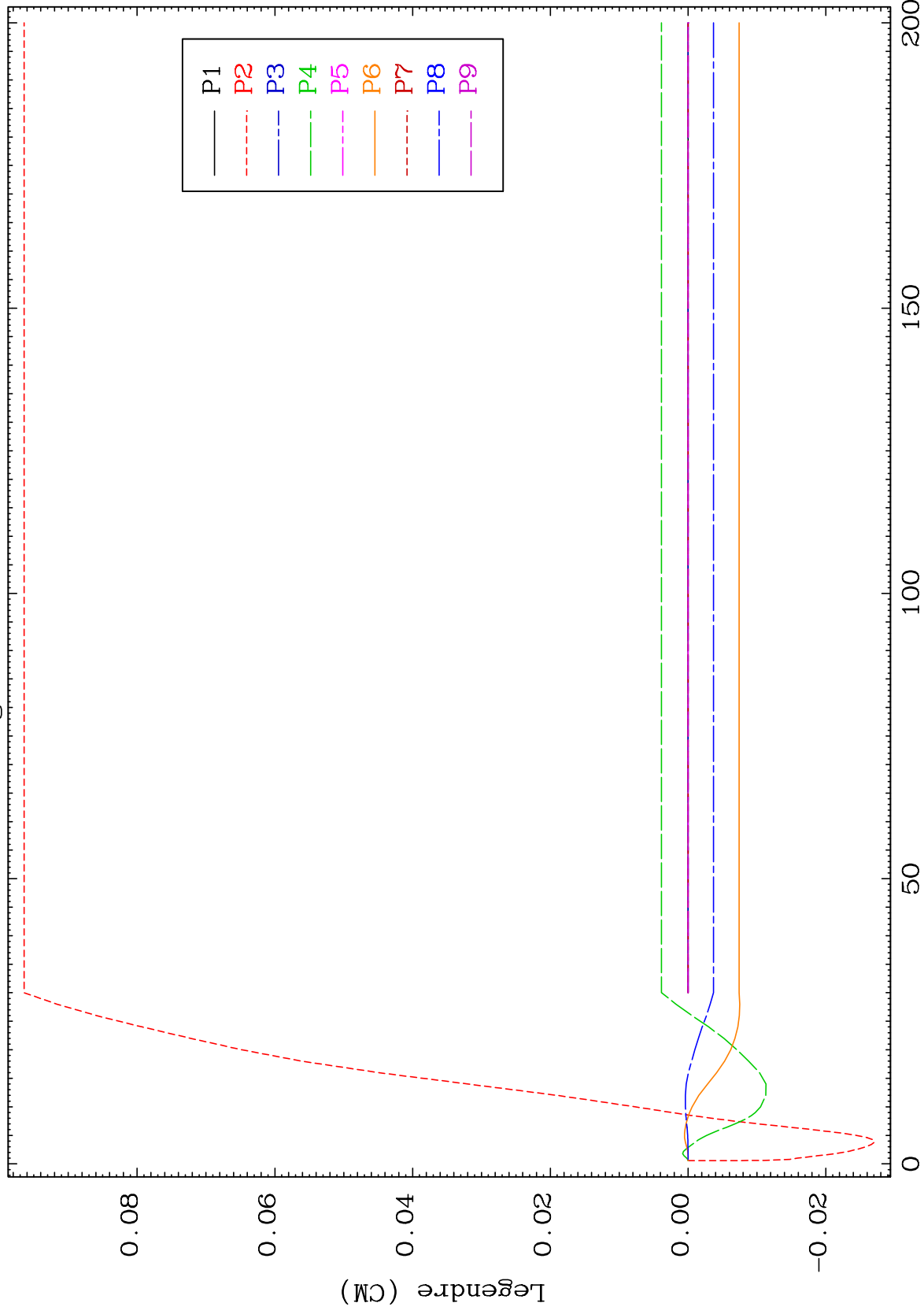
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



61-Pm-138

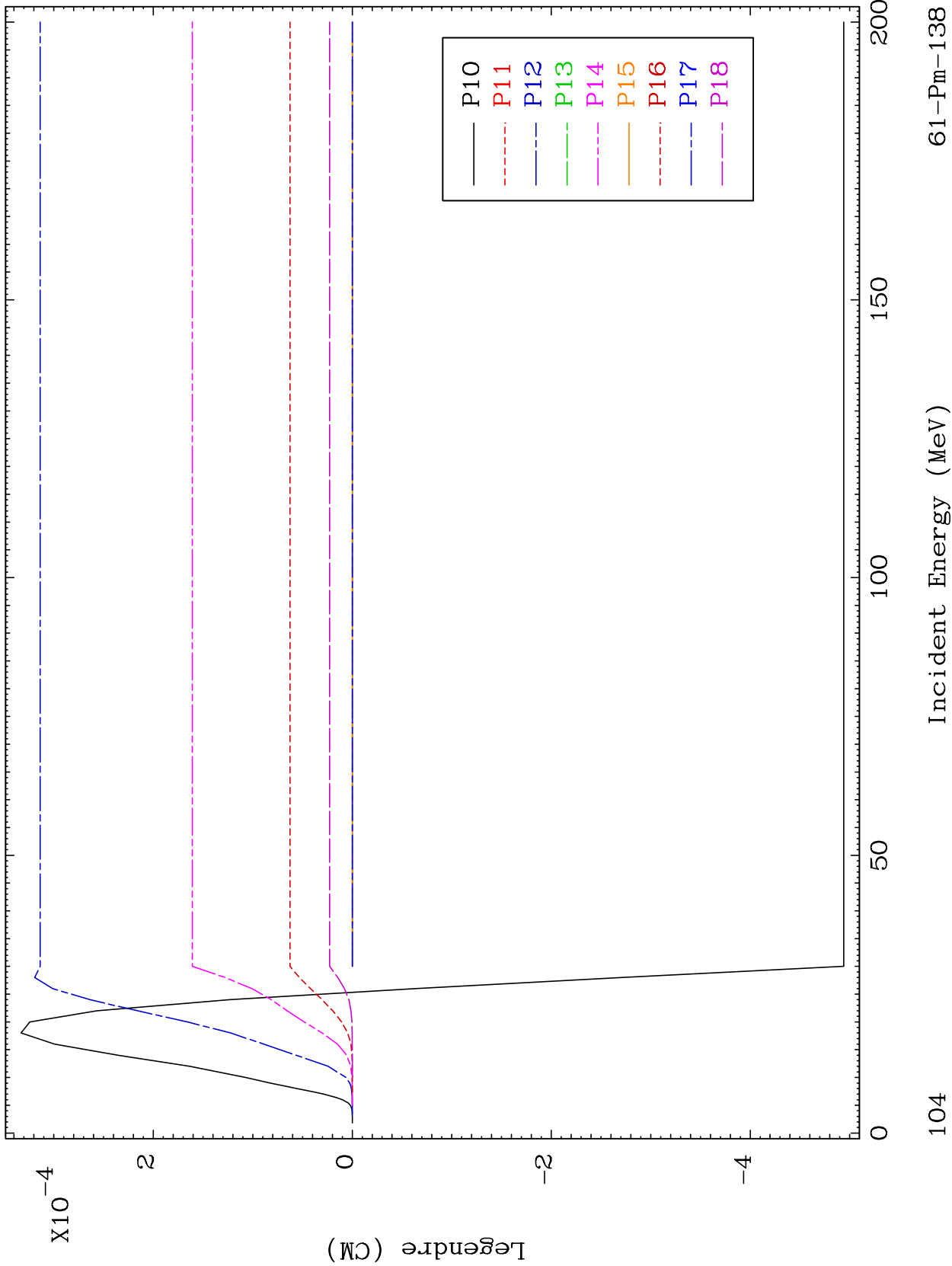
Incident Energy (MeV)

103

MAT 6122

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

61-Pm-138



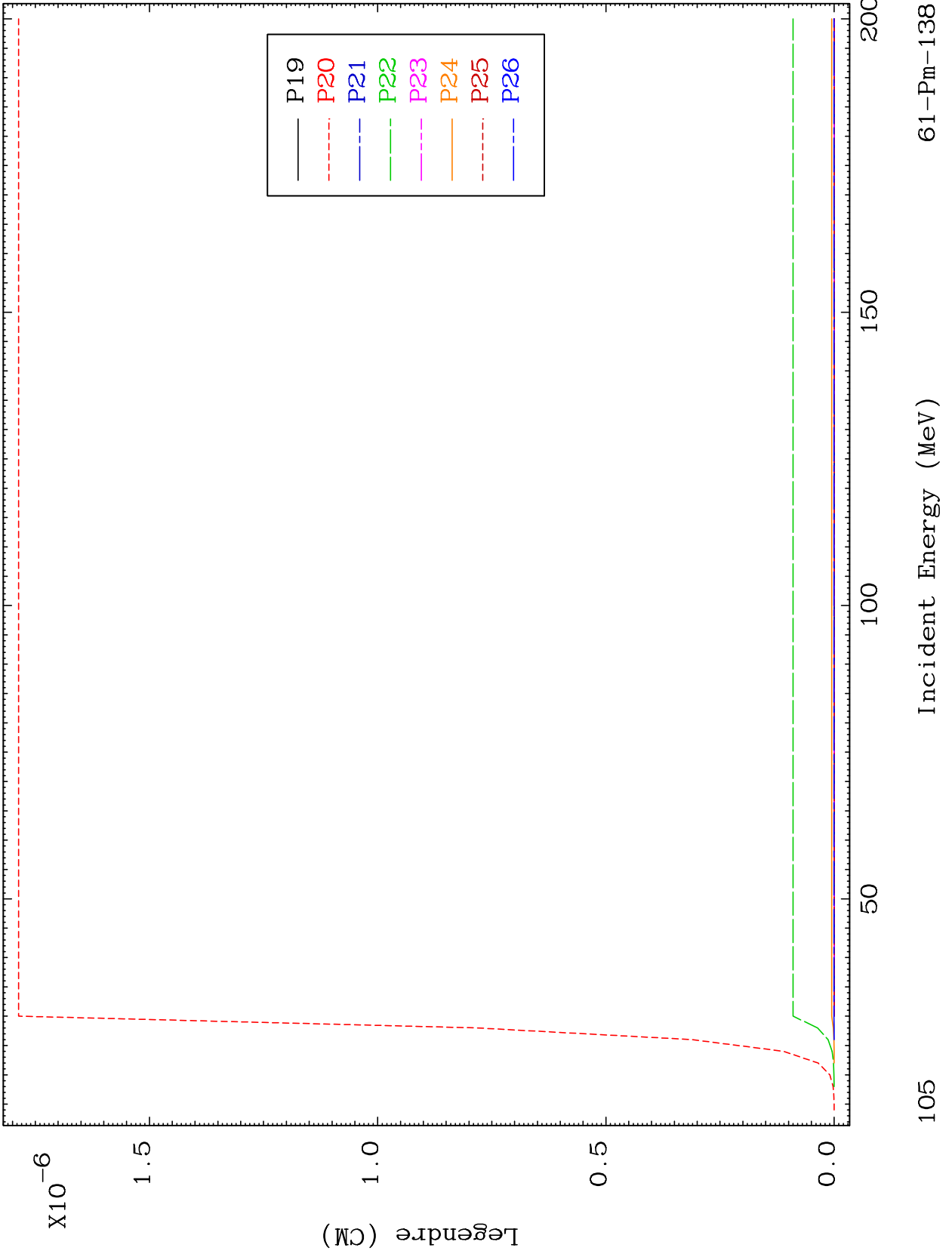
104

61-Pm-138

MAT 6122

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

61-Pm-138

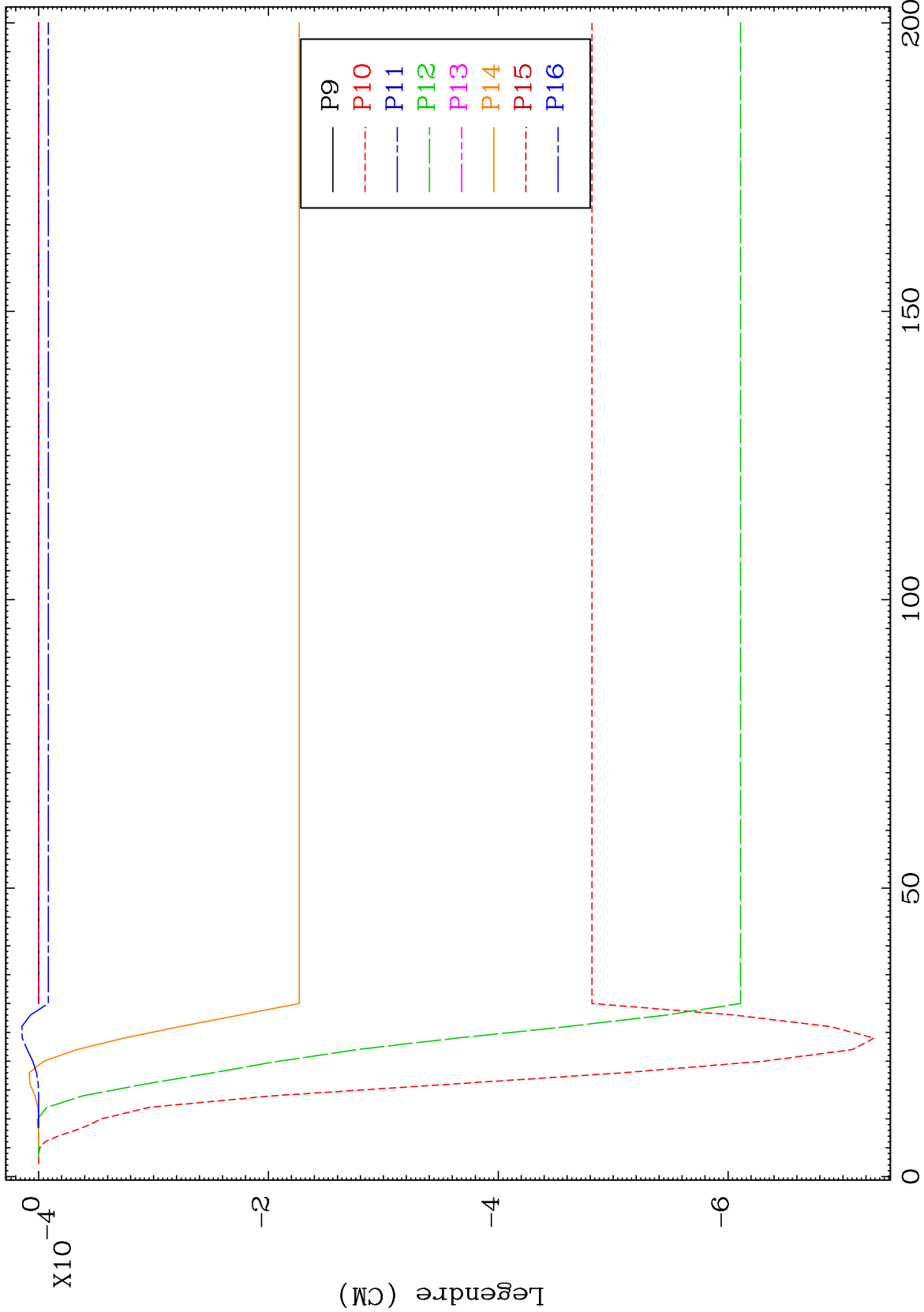


MAT 6122

MT= 75 (n,n') Level

61-Pm-138

Legendre Coefficients



107

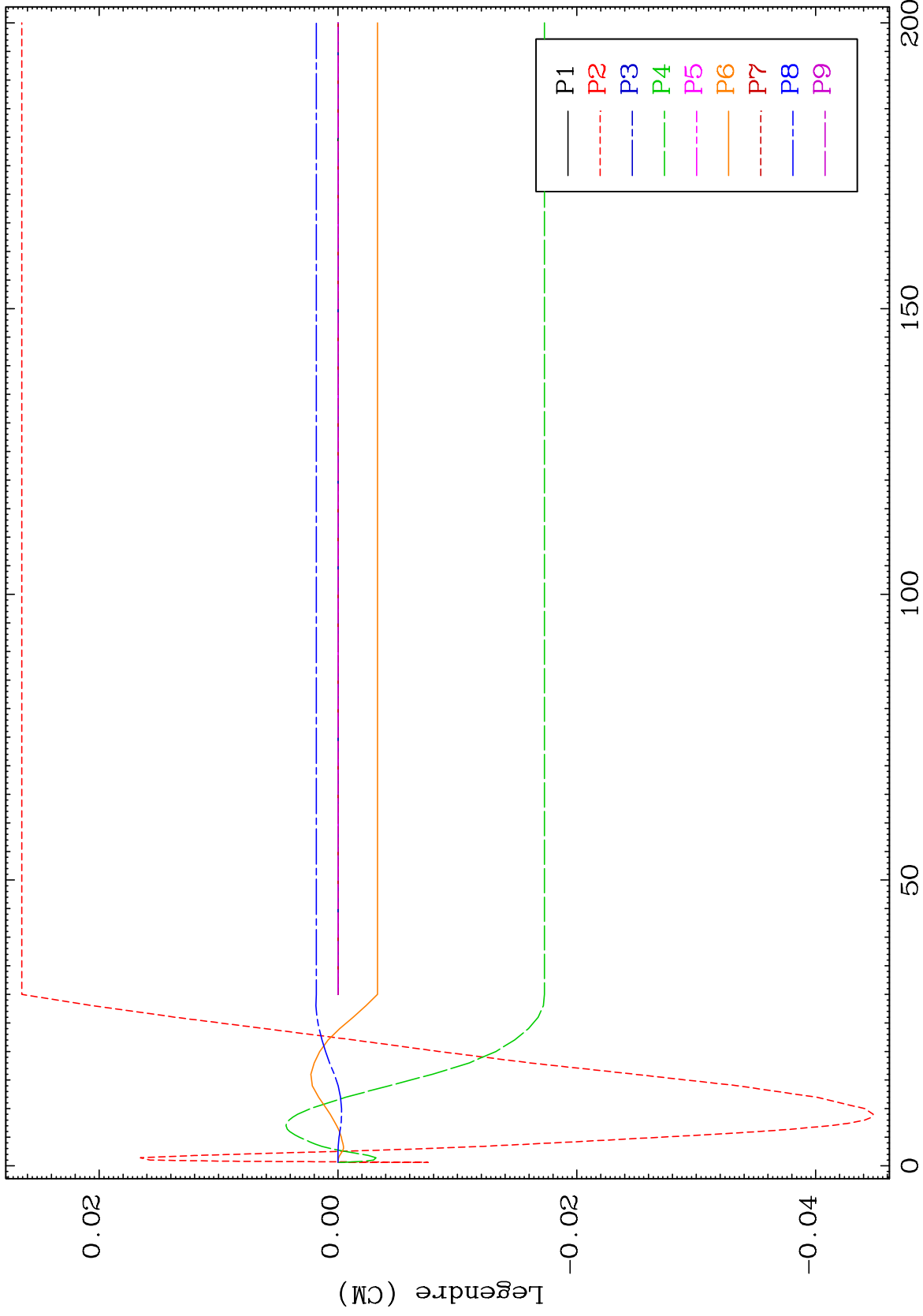
61-Pm-137

61-Pm-138

MAT 61222

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

61-Pm-138



61-Pm-138

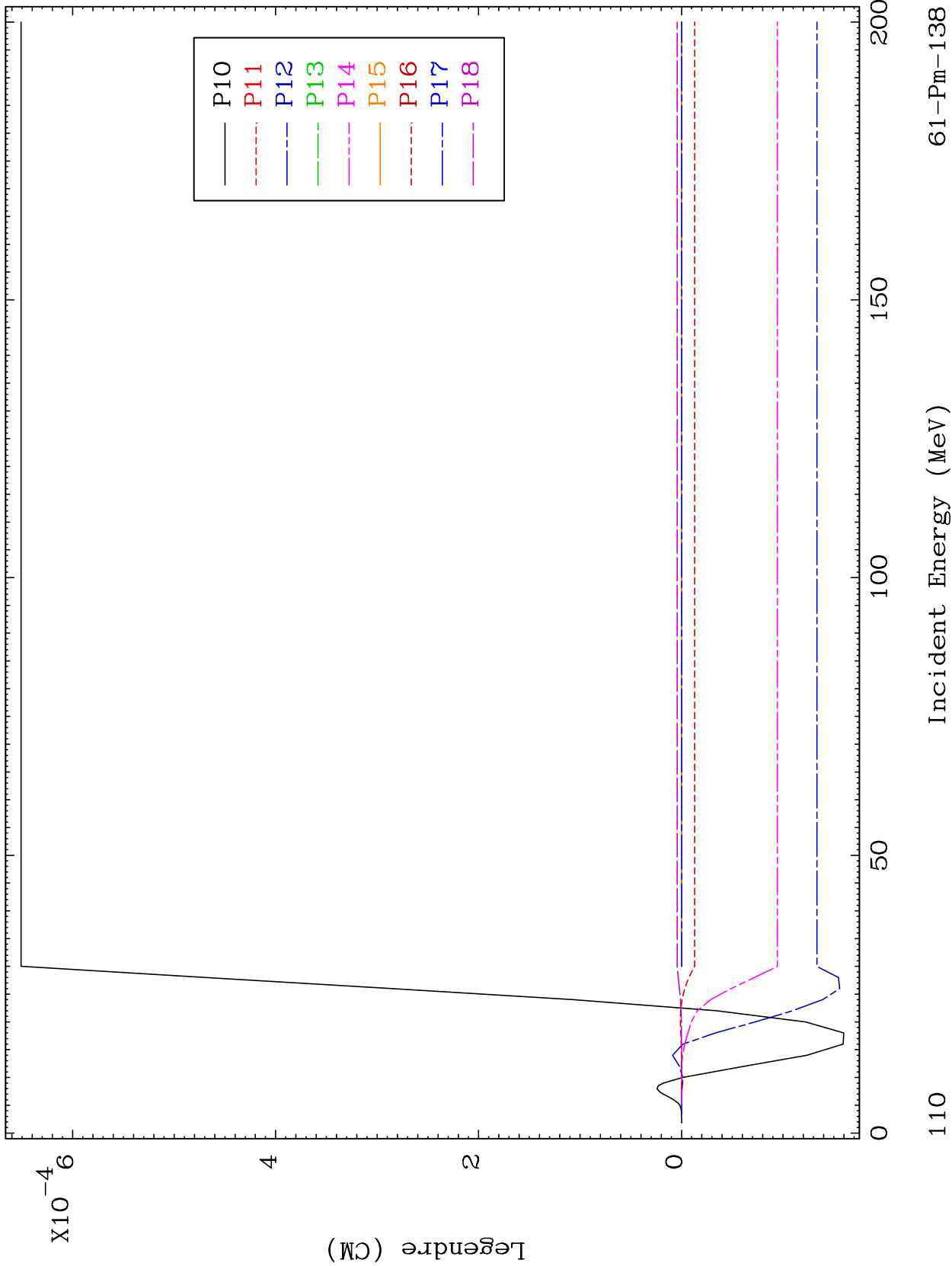
Incident Energy (MeV)

109

MAT 6122

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

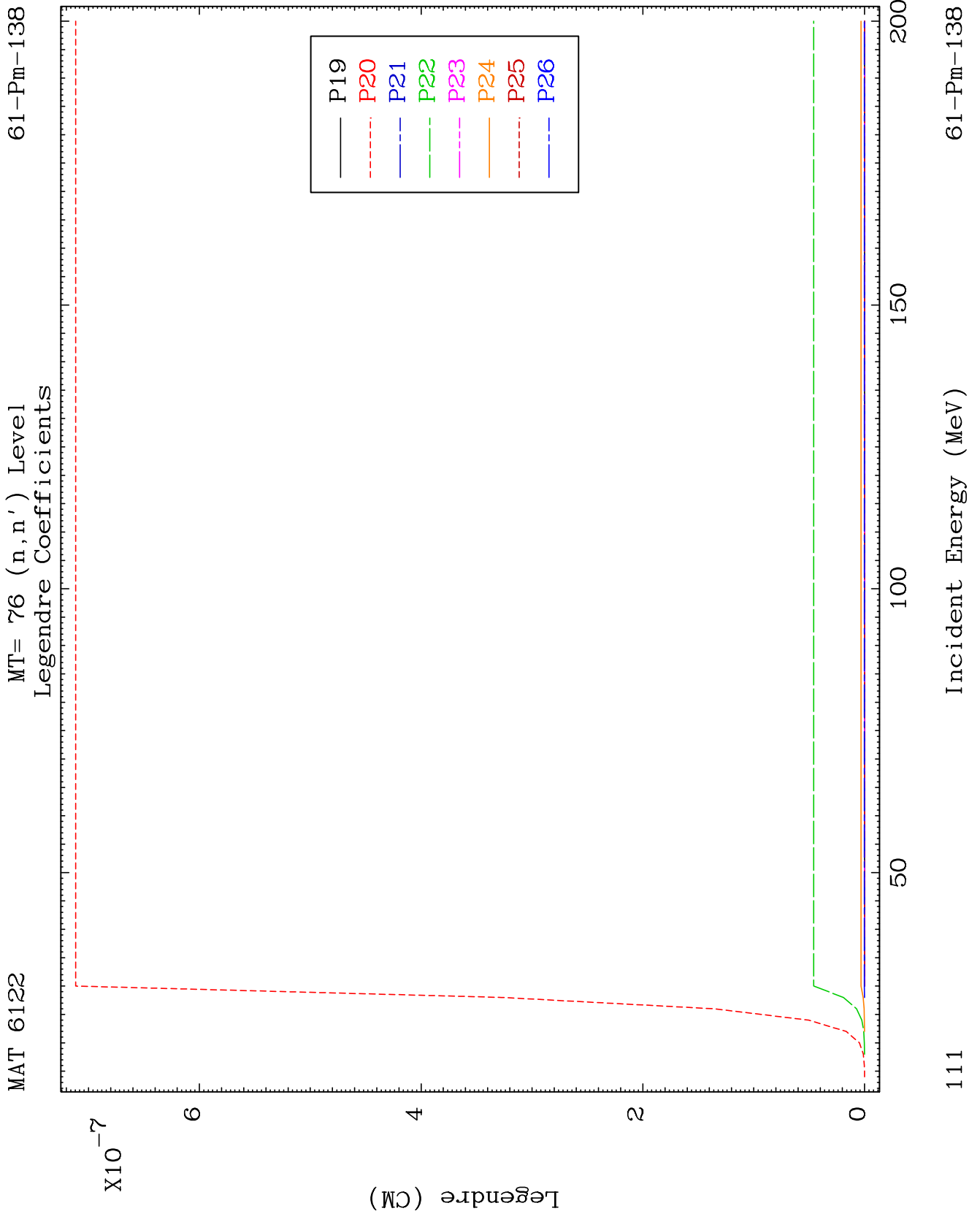
61-Pm-138



61-Pm-138

Incident Energy (MeV)

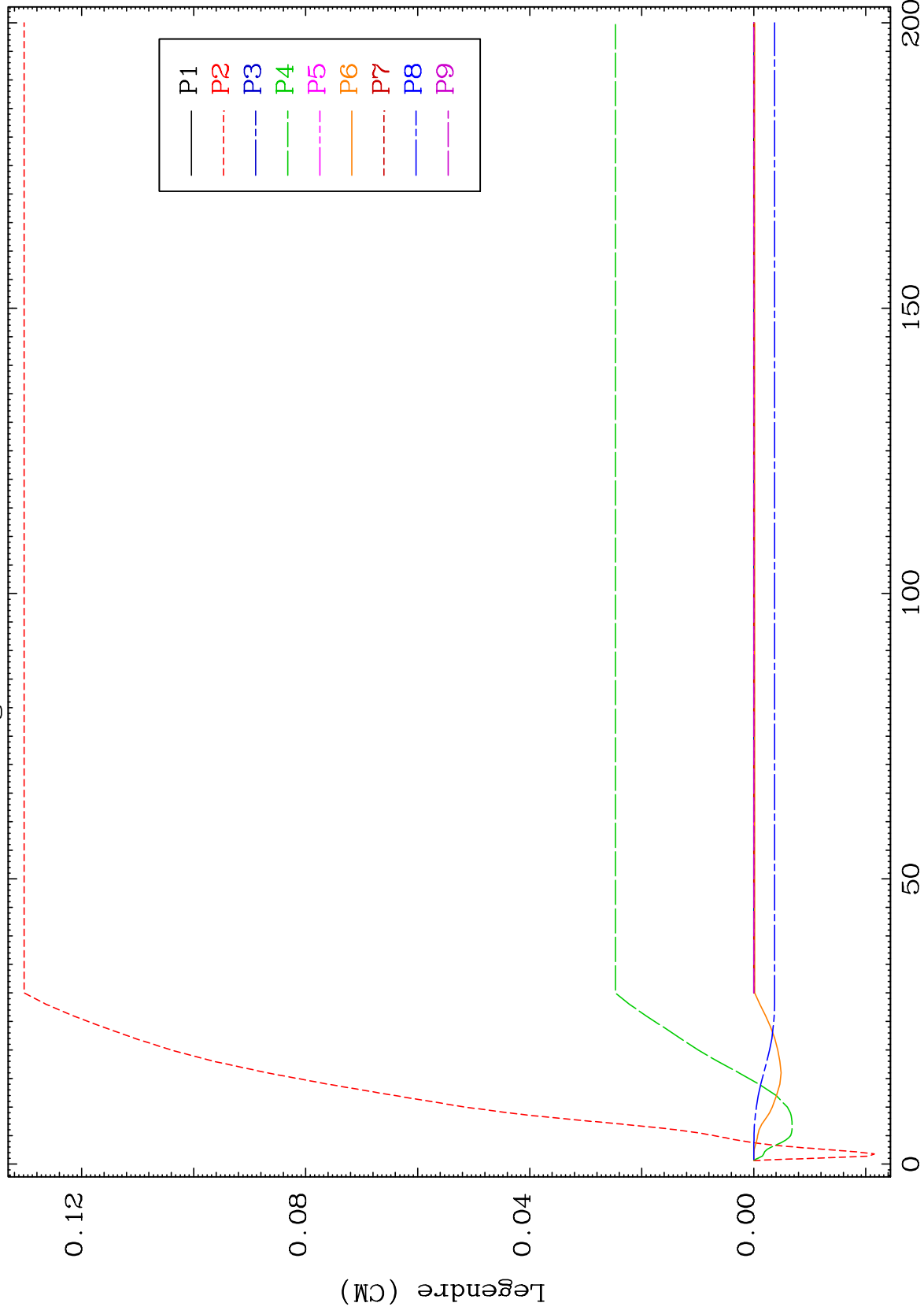
110



MAT 6122

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

61-Pm-138



61-Pm-138

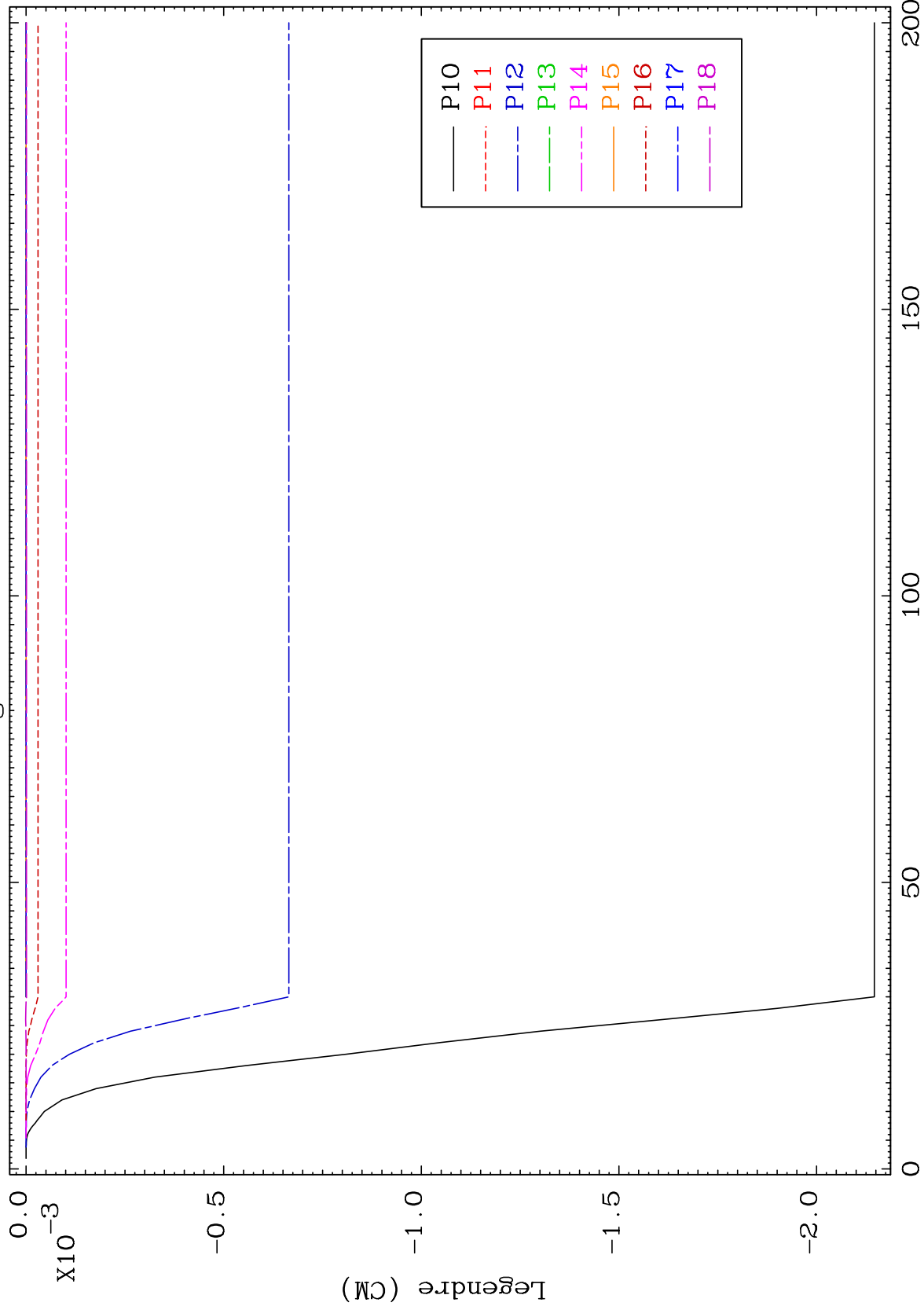
Incident Energy (MeV)

112

MAT 6122

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

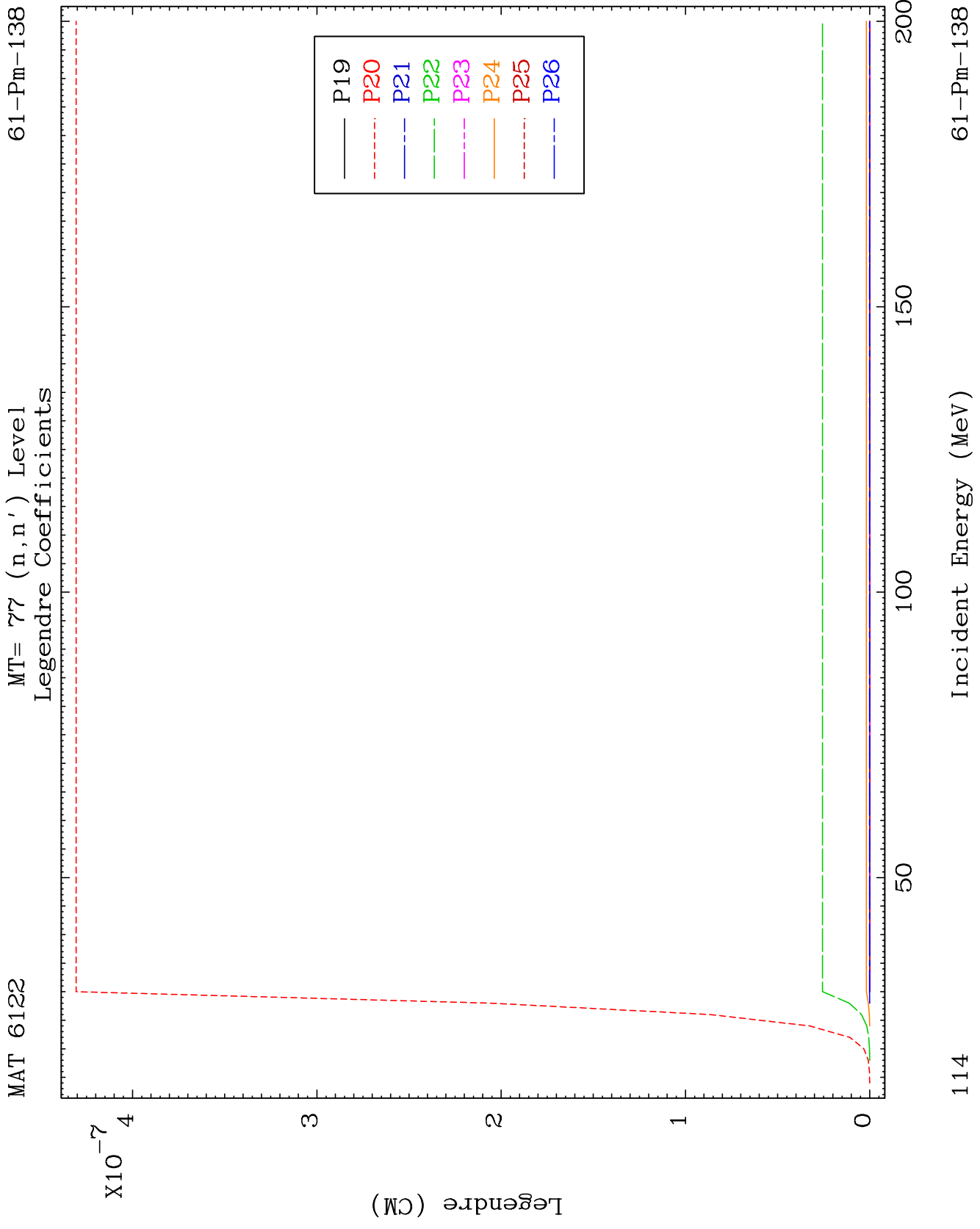
61-Pm-138



113

Incident Energy (MeV)

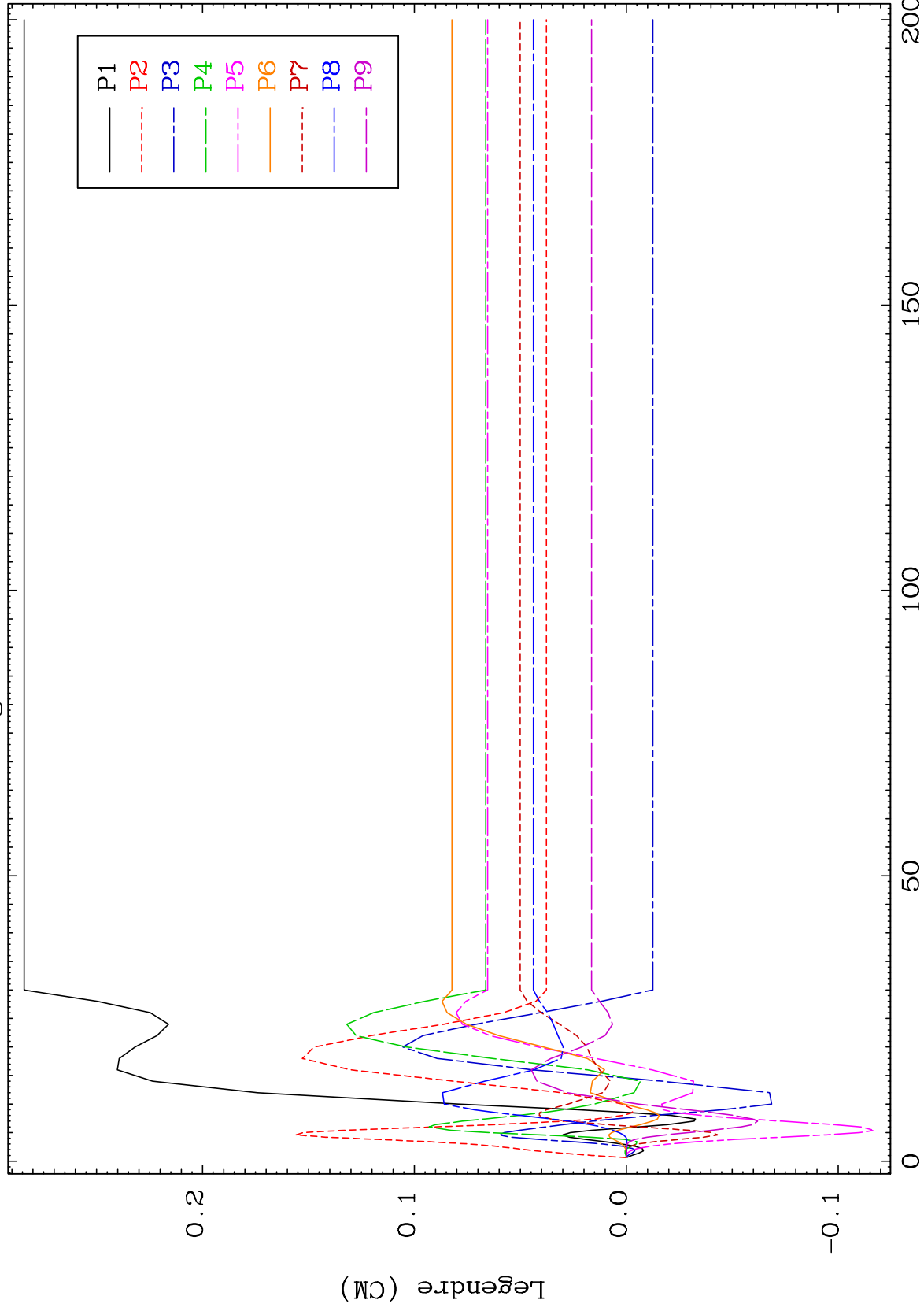
61-Pm-138



MAT 6122

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

61-Pm-138



61-Pm-138

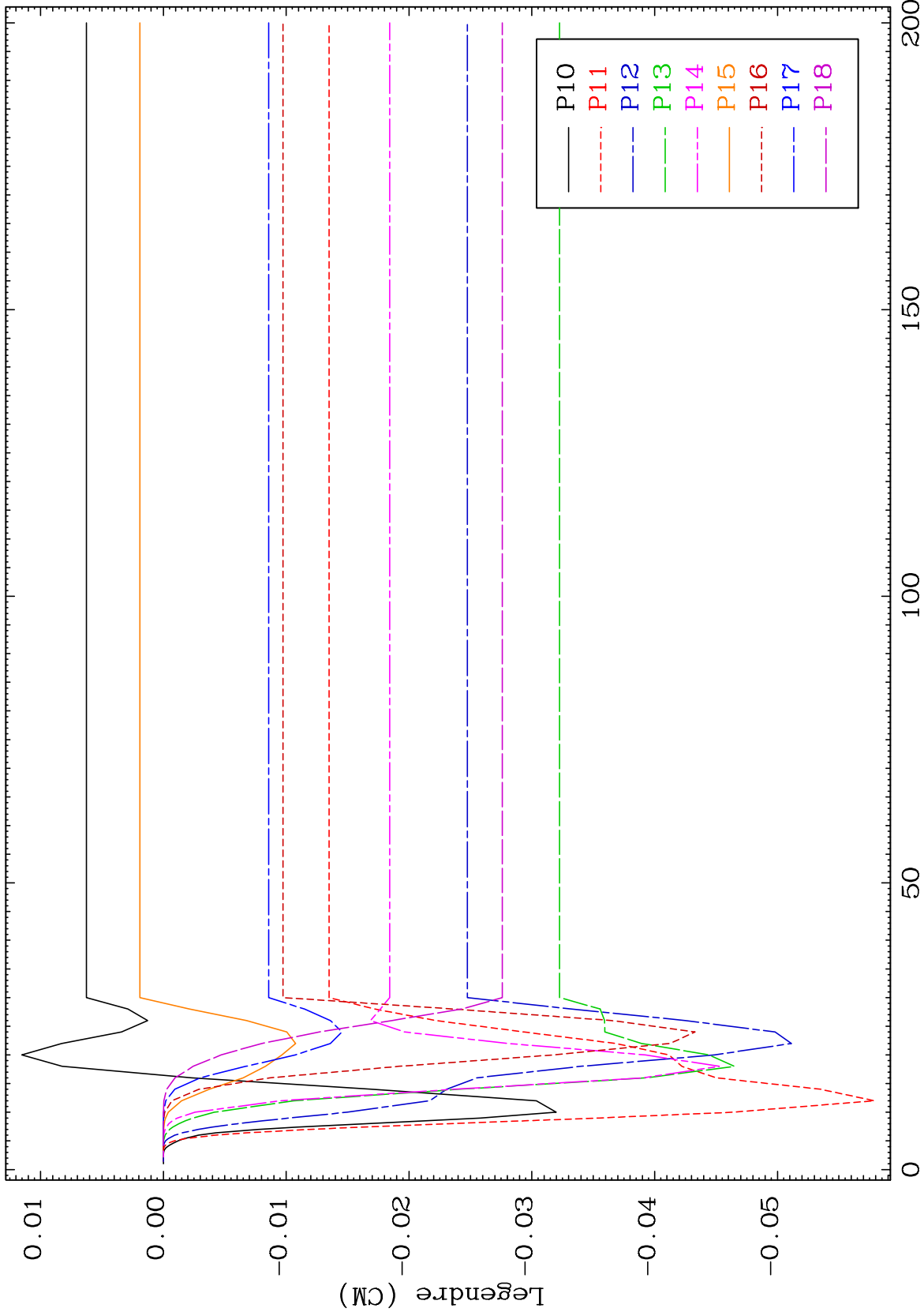
Incident Energy (MeV)

115

MAT 6122

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

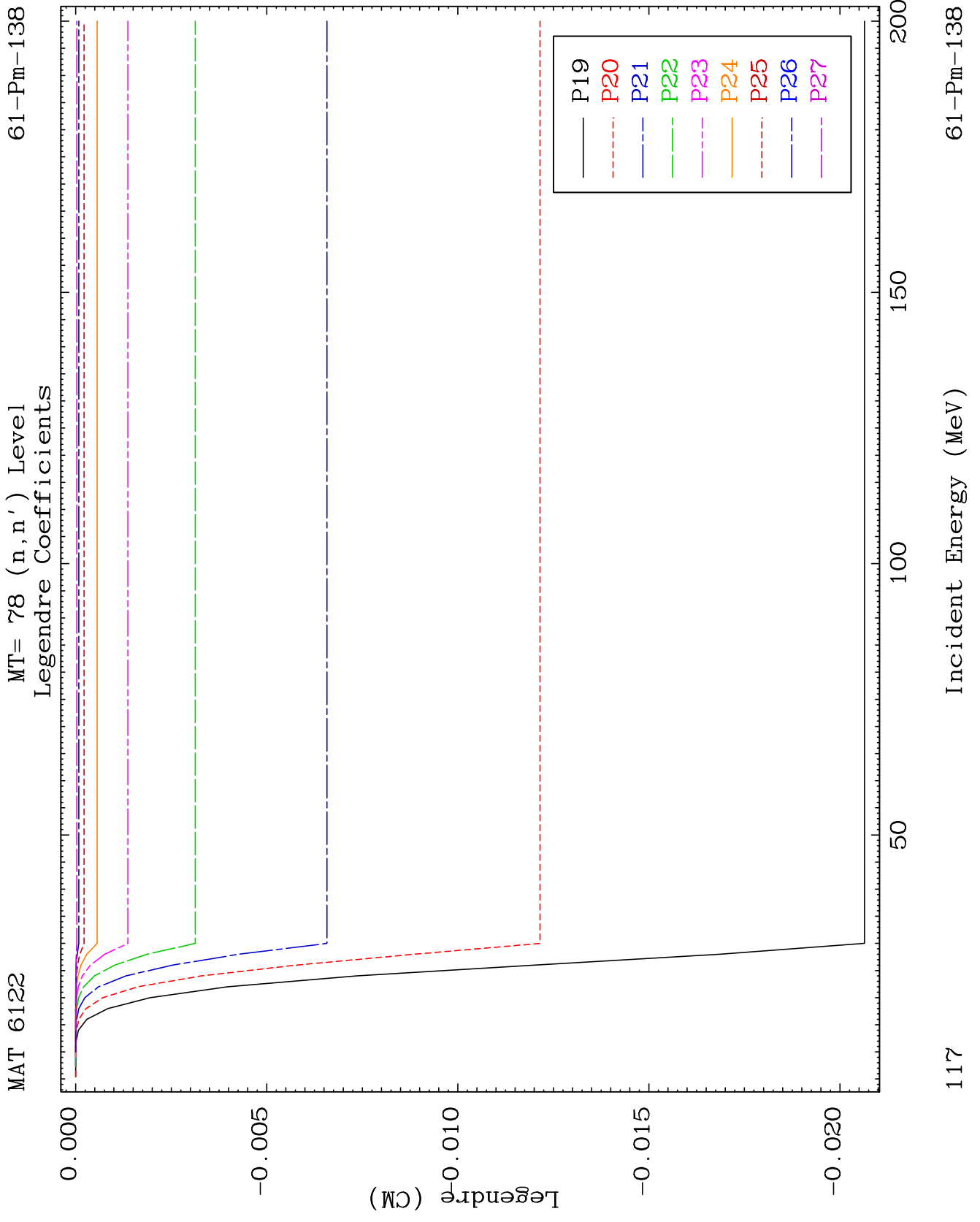
61-Pm-138



116

Incident Energy (MeV)

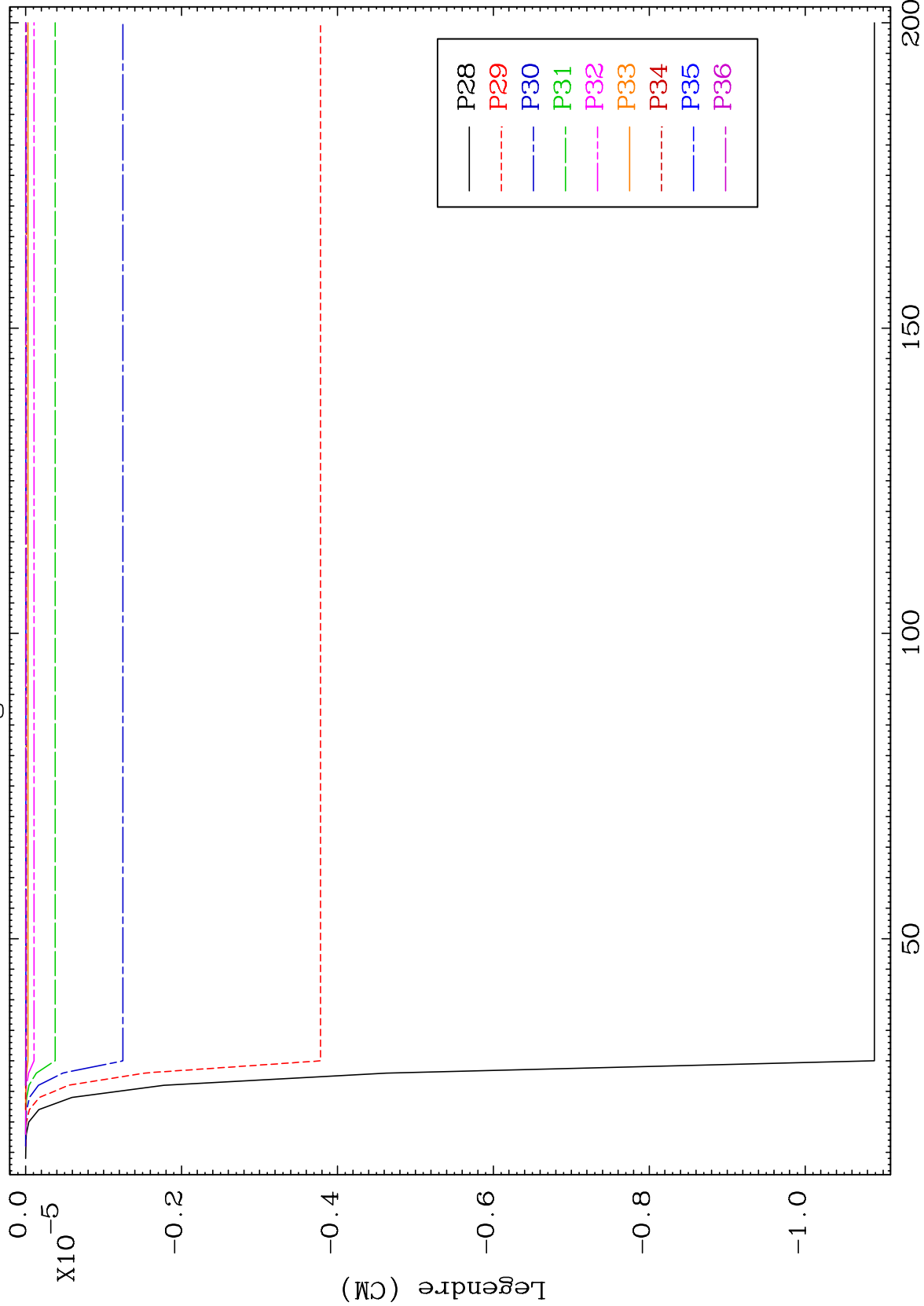
61-Pm-138



MAT 6122

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

61-Pm-138



61-Pm-138

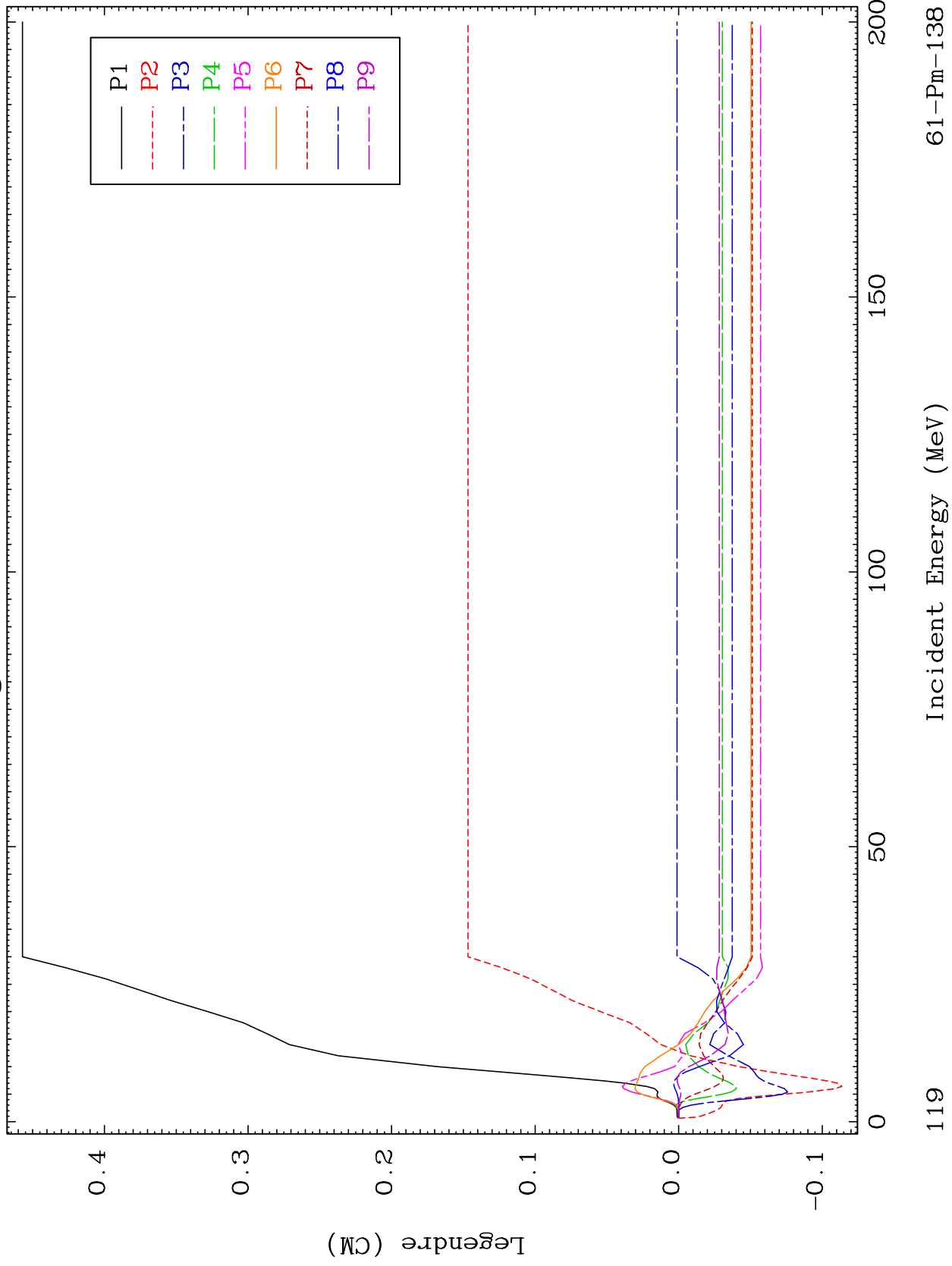
Incident Energy (MeV)

118

MAT 6122

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

61-Pm-138



61-Pm-138

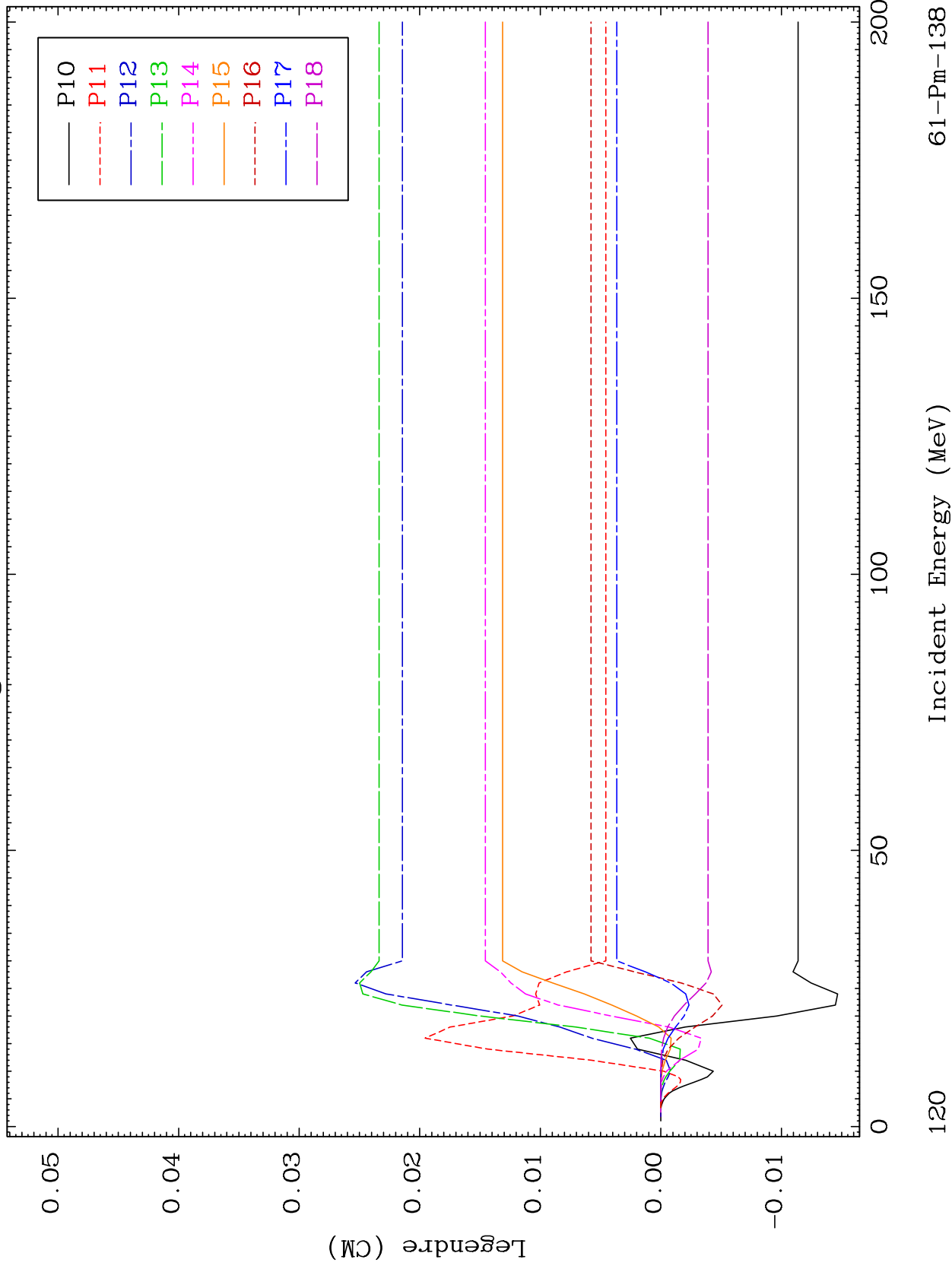
Incident Energy (MeV)

119

MAT 6122

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

61-Pm-138



61-Pm-138

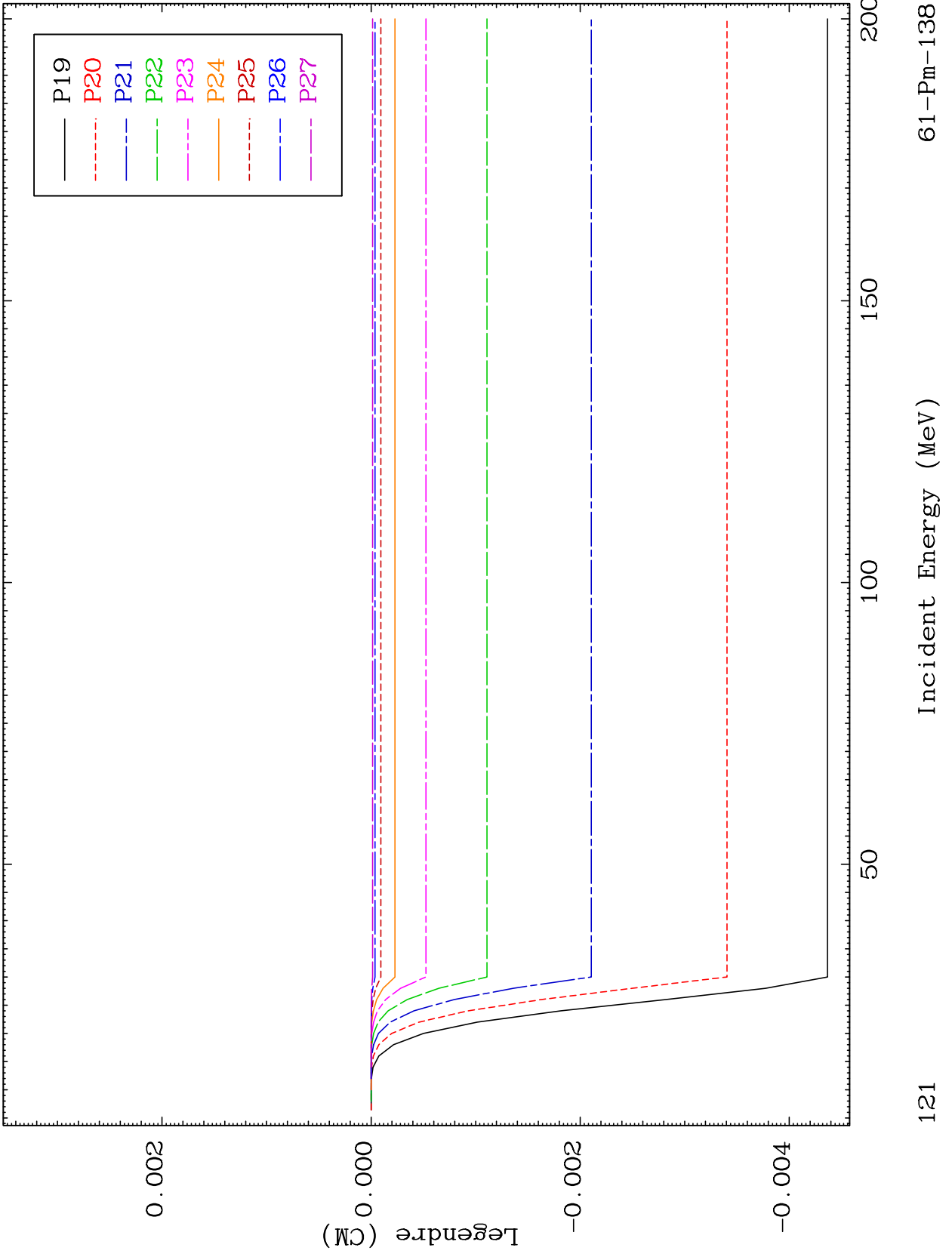
Incident Energy (MeV)

120

MAT 6122

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

61-Pm-138



121

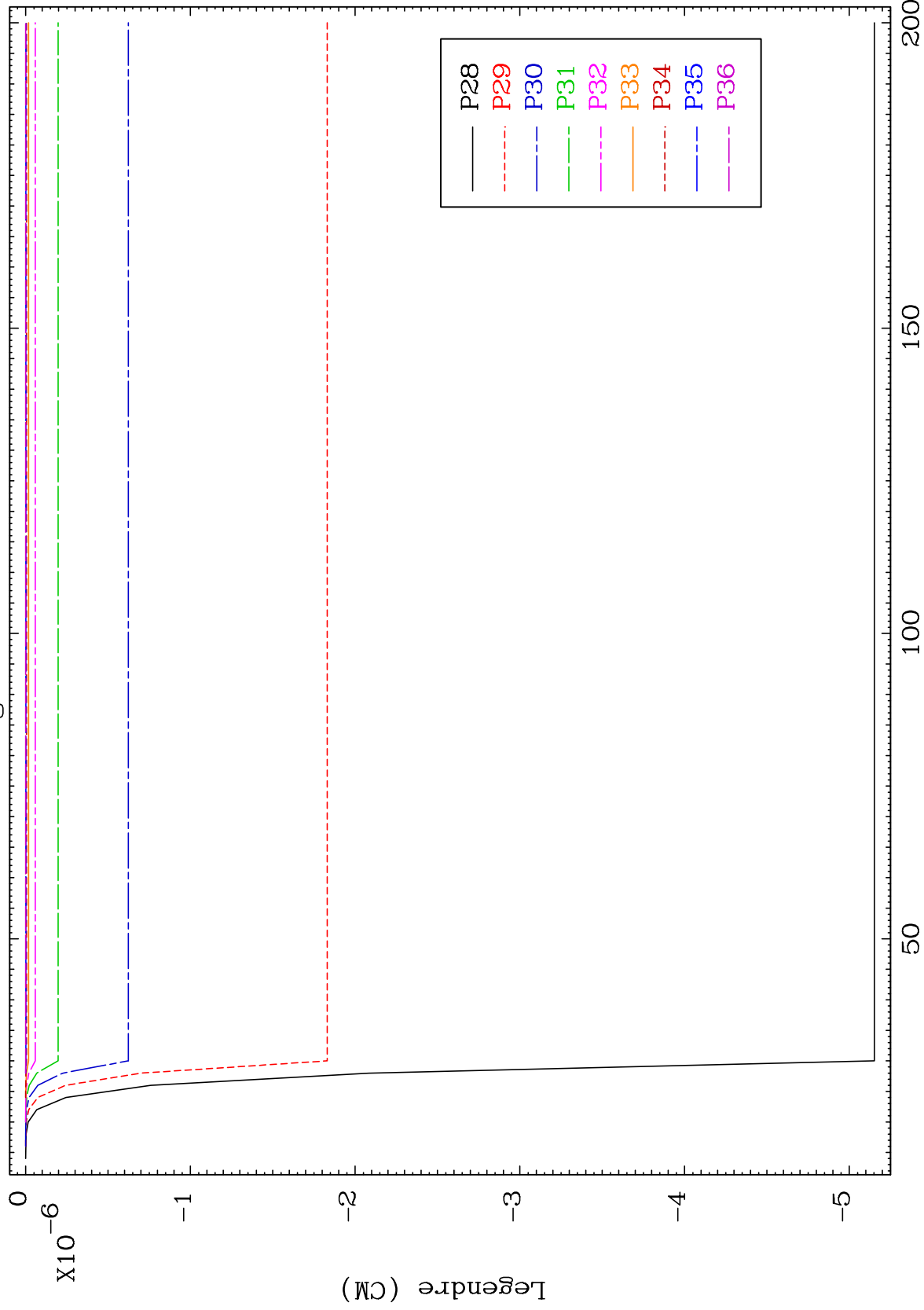
Incident Energy (MeV)

61-Pm-138

MAT 6122

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

61-Pm-138



122

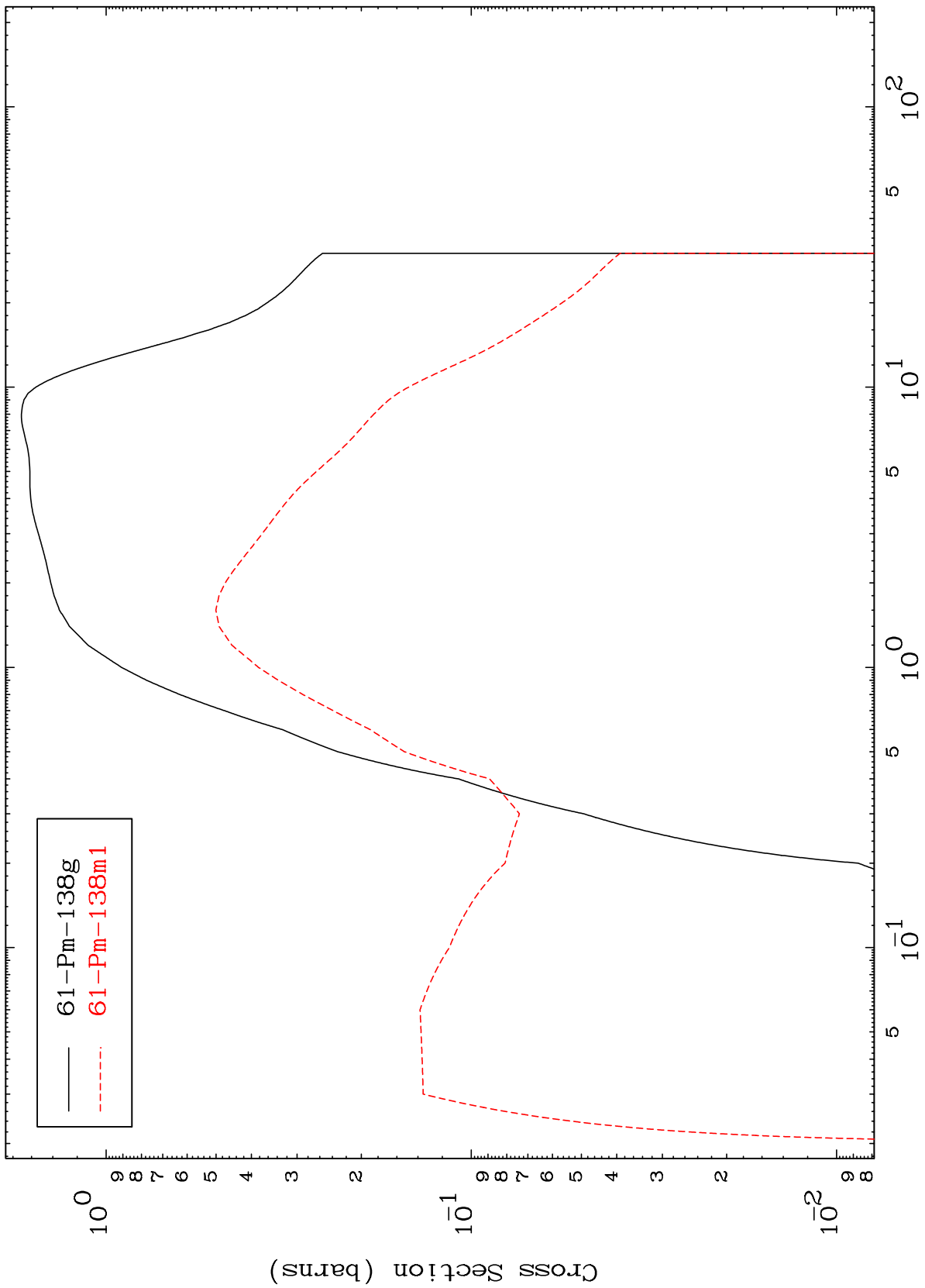
Incident Energy (MeV)

61-Pm-138

MAT 6122

61-Pm-138

Radionuclide Production Cross Section



123

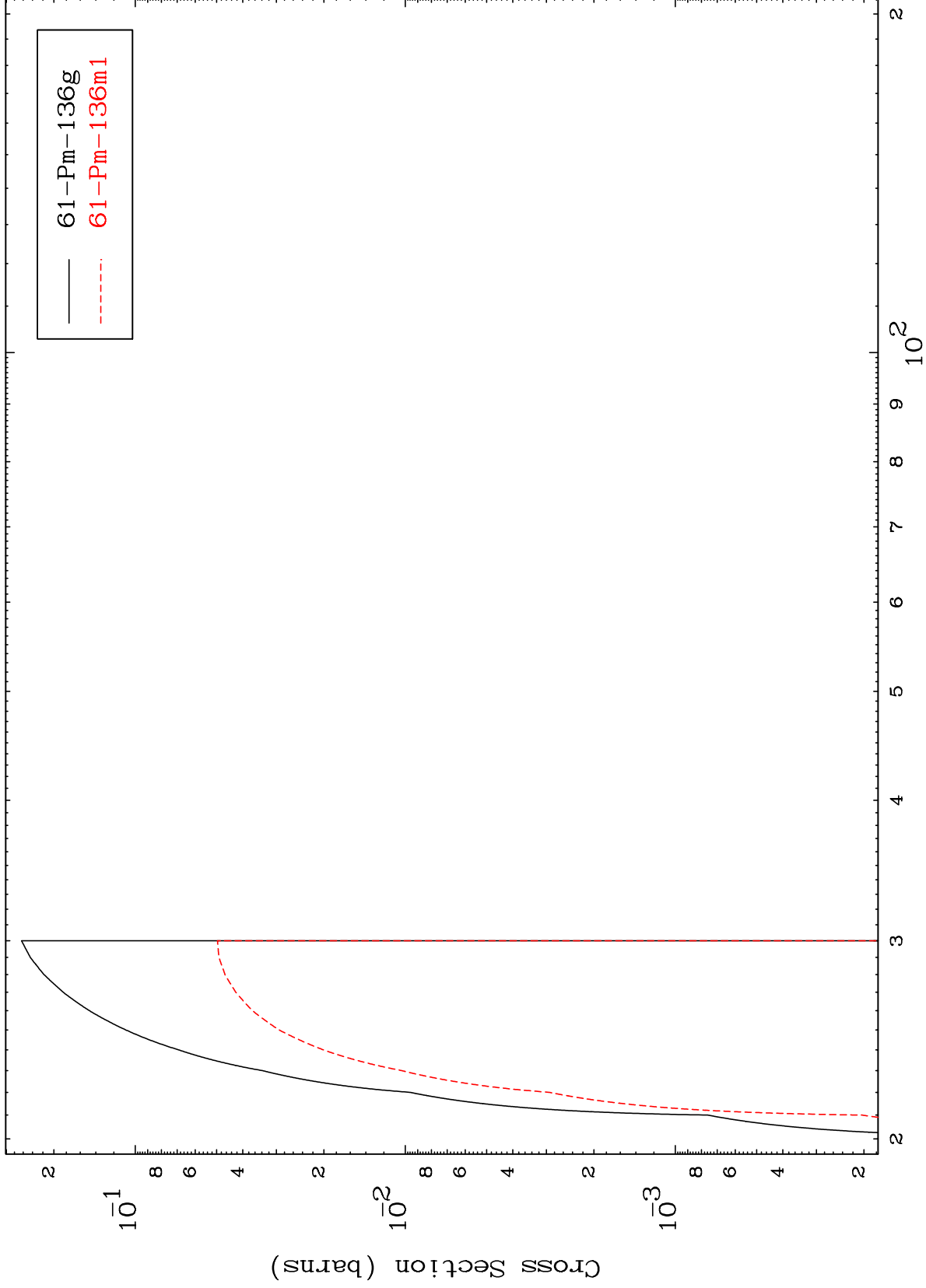
61-Pm-138

MAT 6122

(n,3n)

61-Pm-138

Radionuclide Production Cross Section



Incident Energy (MeV)

61-Pm-138

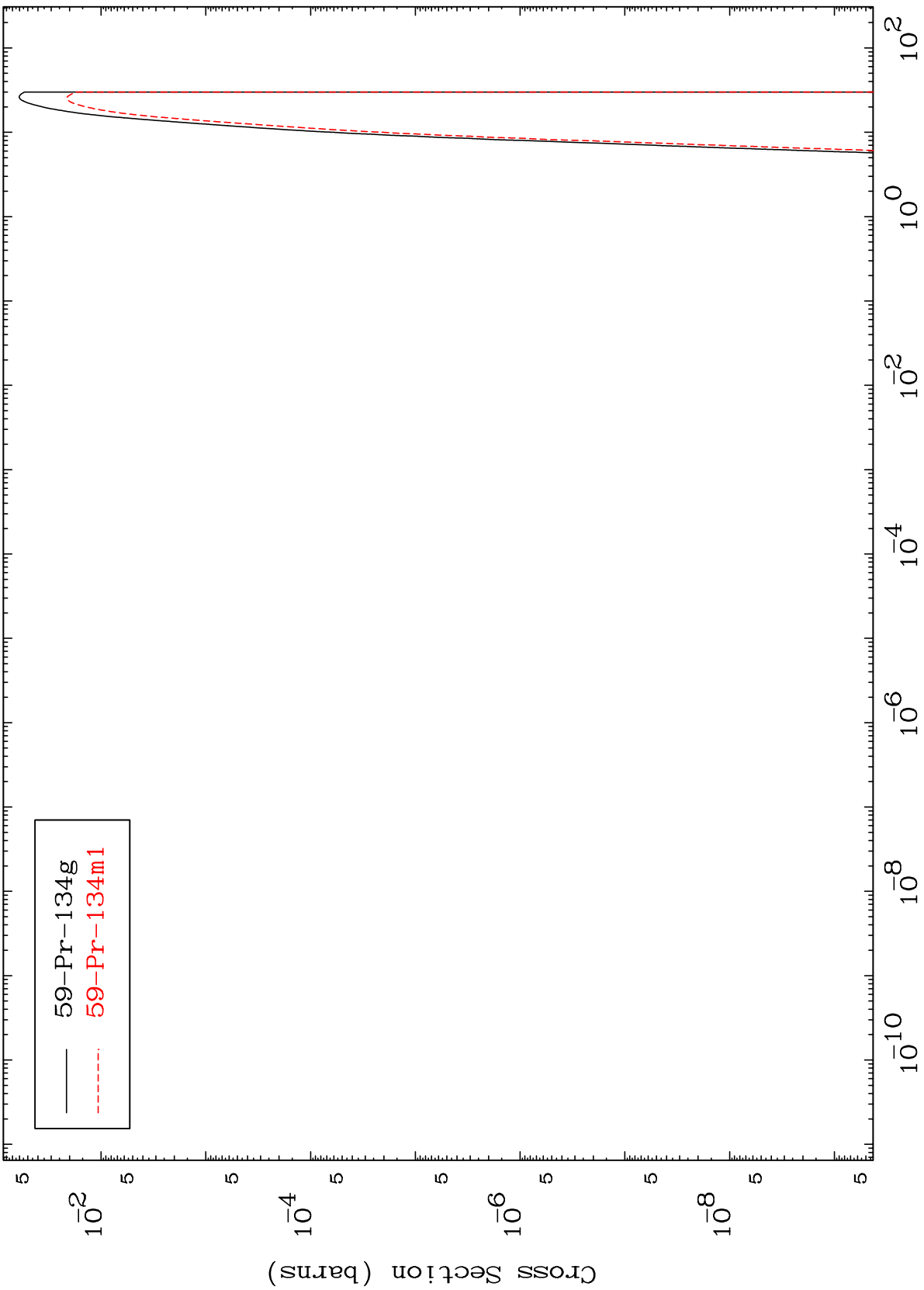
124

MAT 6122

$(n, n') \alpha$

61-Pm-138

Radionuclide Production Cross Section



125

Incident Energy (MeV)

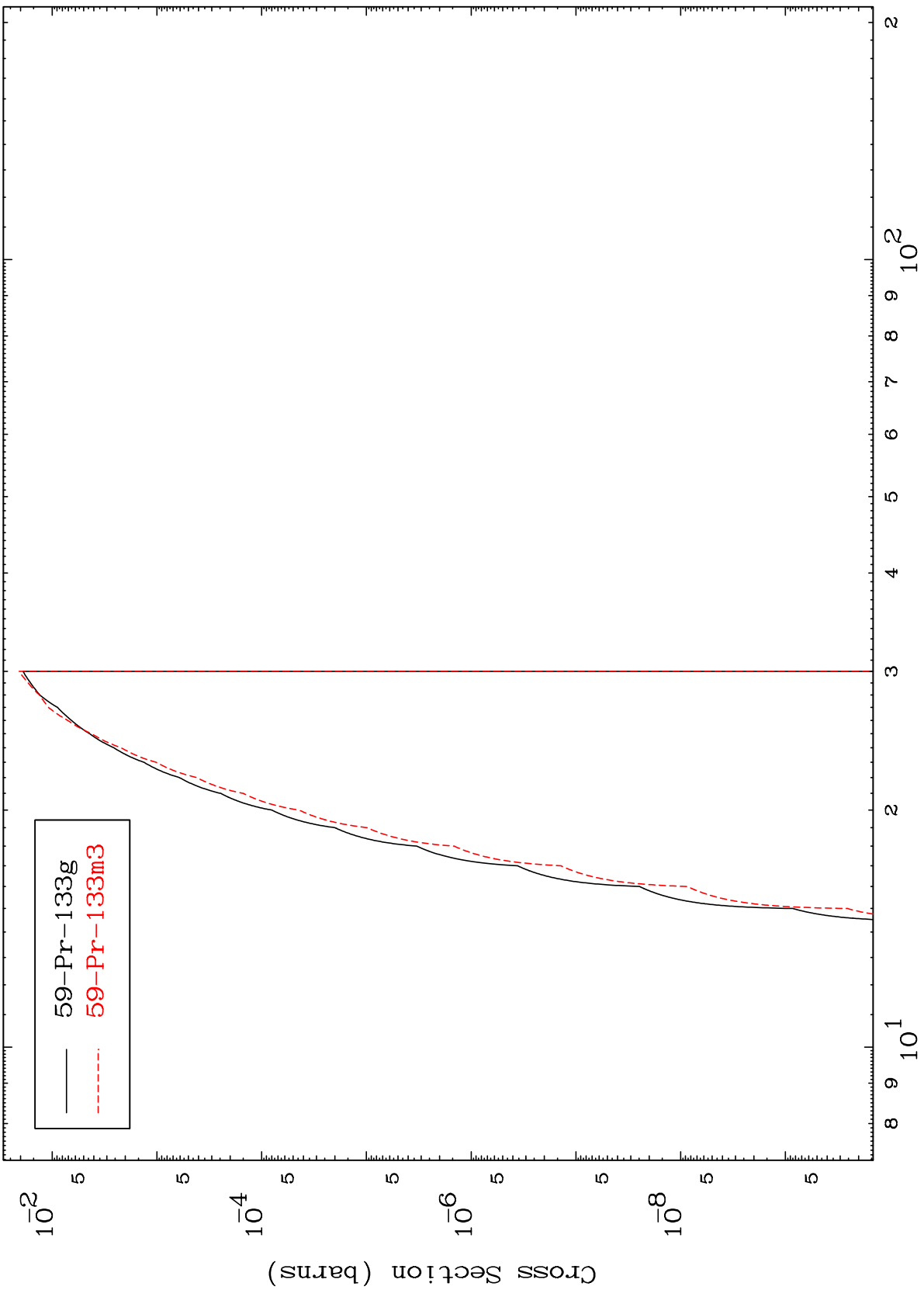
61-Pm-138

MAT 6122

(n,2n) α

61-Pm-138

Radionuclide Production Cross Section



59-Pr-133g
59-Pr-133m3

126

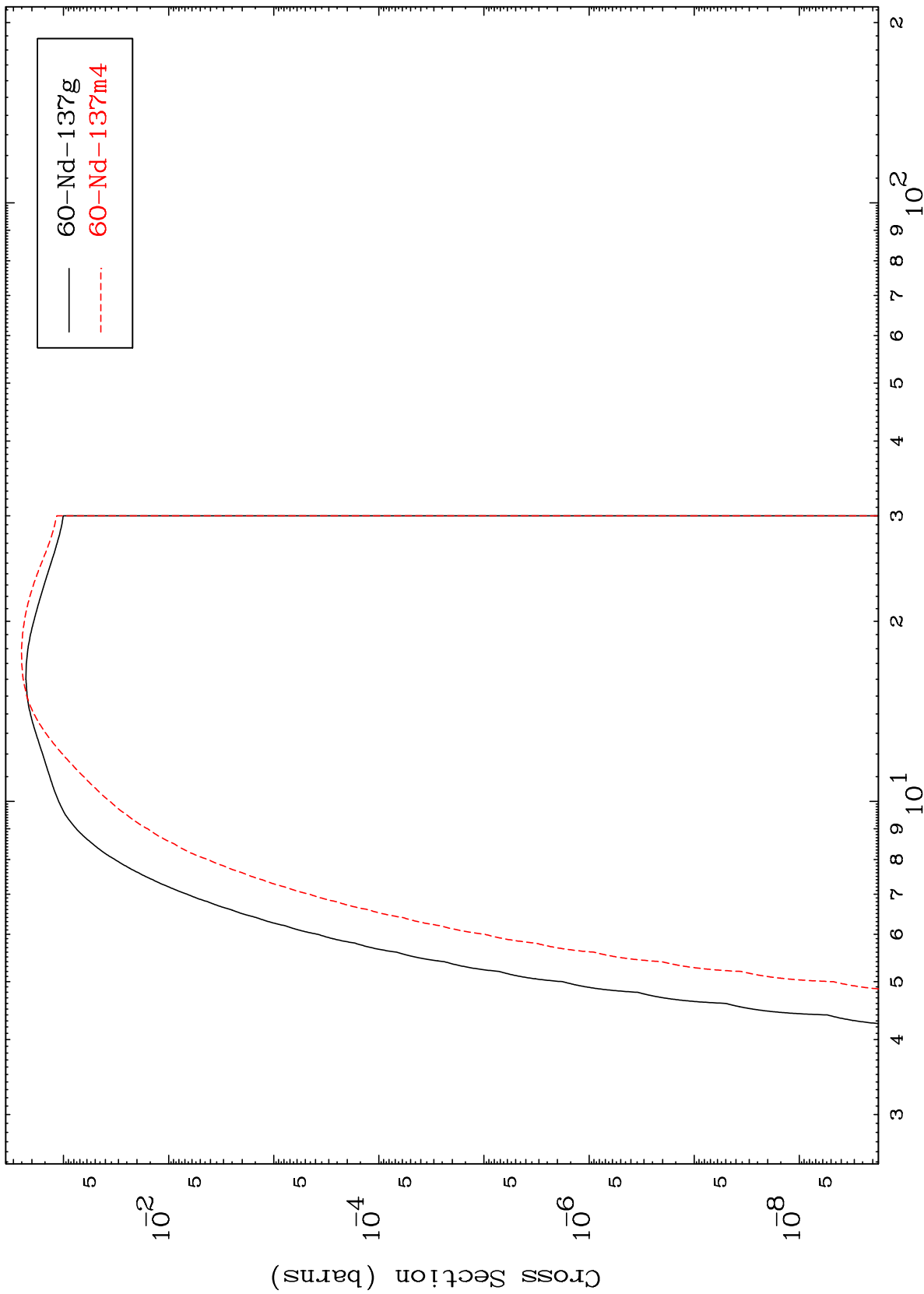
Incident Energy (MeV)

61-Pm-138

MAT 6122

61-Pm-138

(n, n') p
Radionuclide Production Cross Section



127

Incident Energy (MeV)

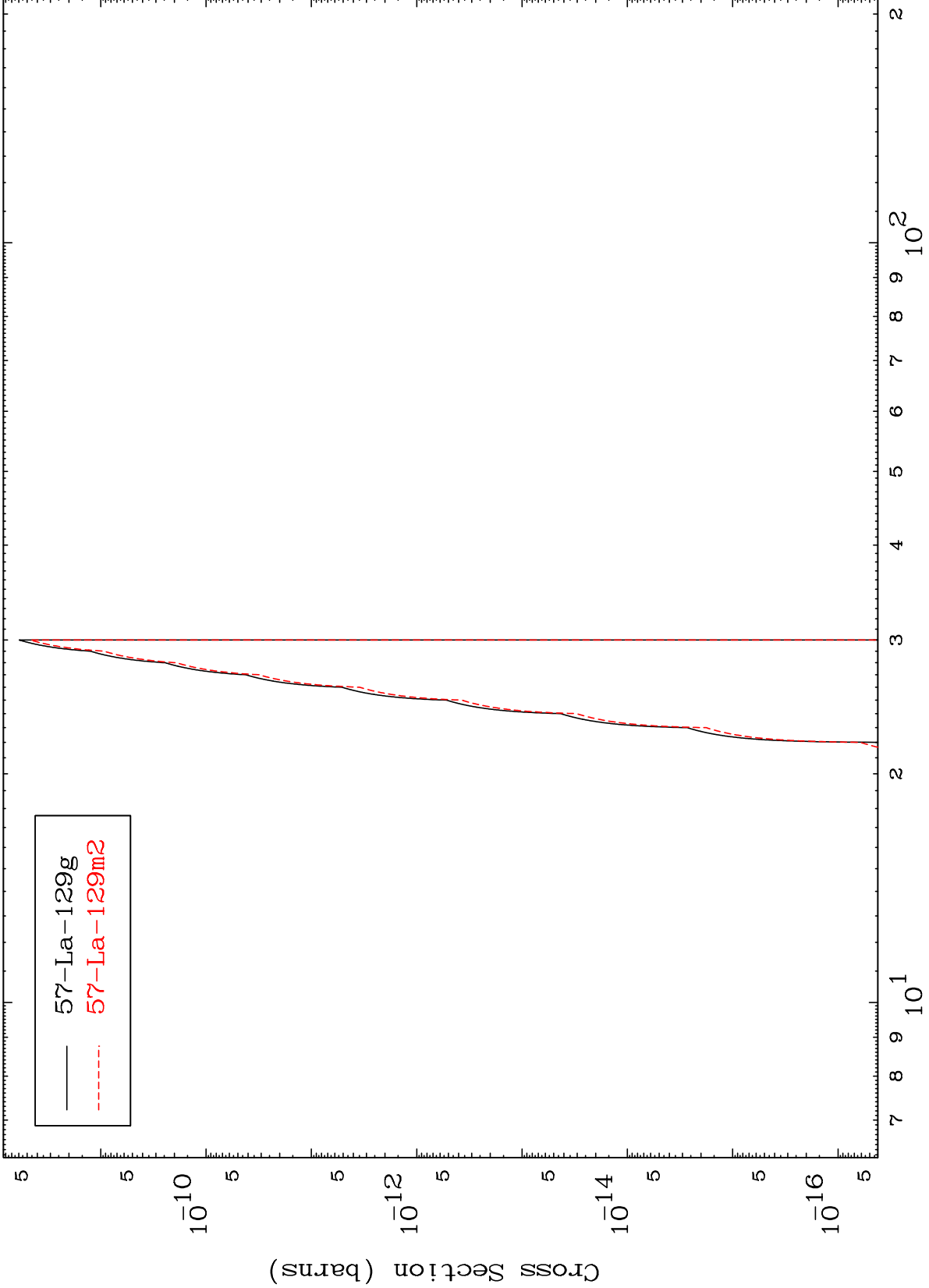
61-Pm-138

MAT 6122

$(n,2n)$ 2α

61-Pm-138

Radionuclide Production Cross Section



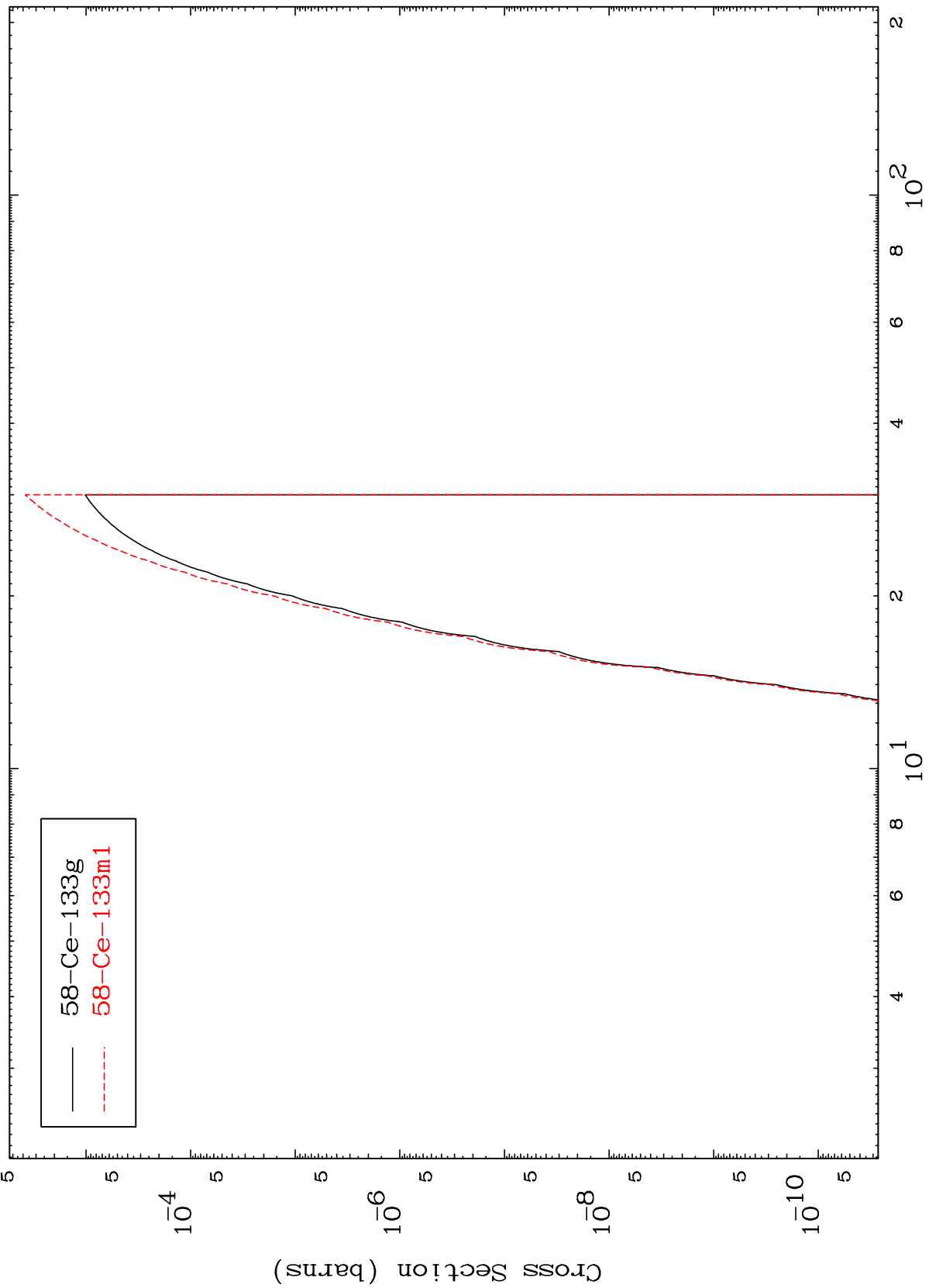
— 57-La-129g
- - - 57-La-129m2

128

Incident Energy (MeV)

61-Pm-138

Radionuclide Production Cross Section

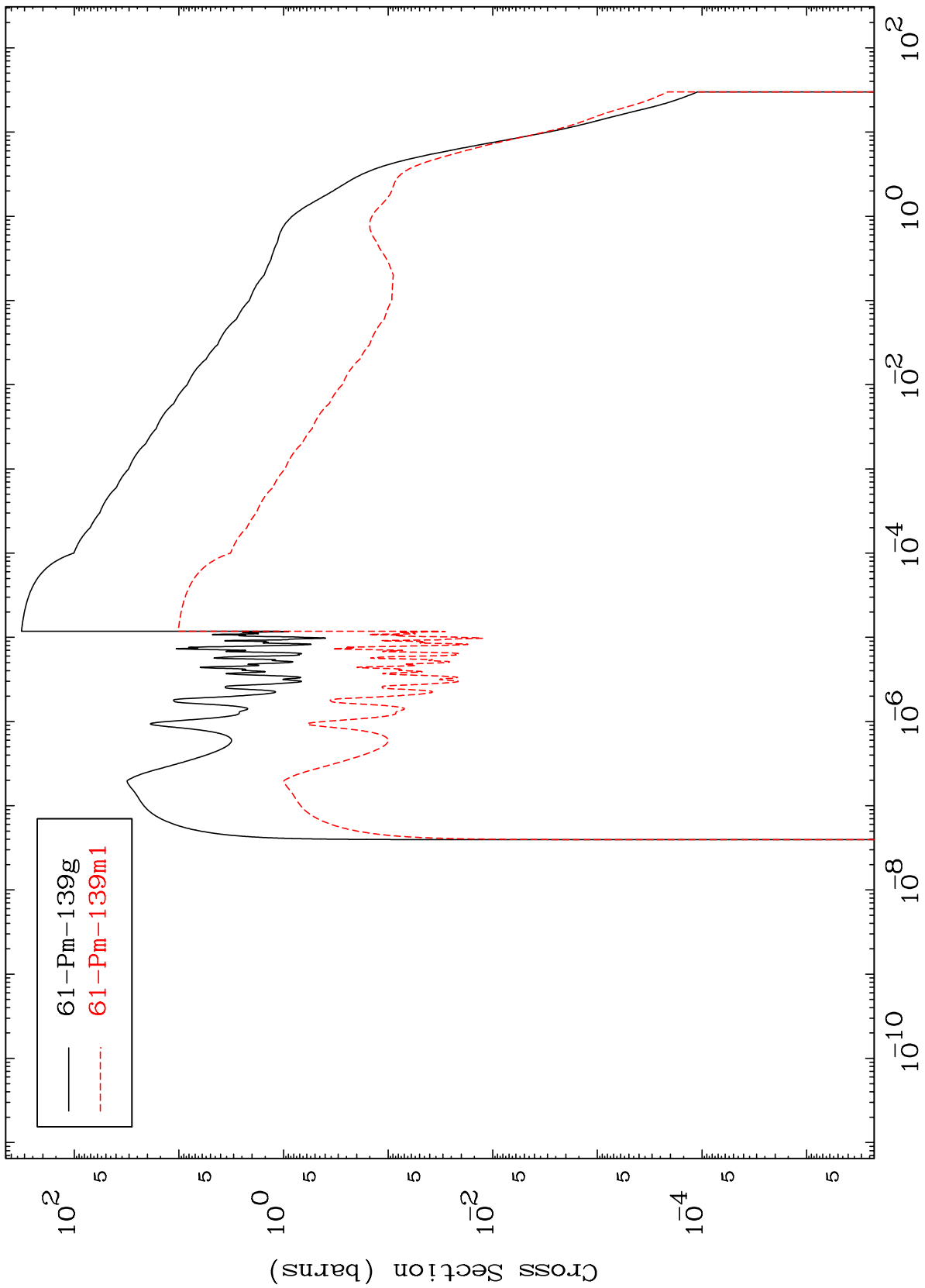


58-Ce-133g
58-Ce-133m1

MAT 6122

61-Pm-138

Radionuclide Production Cross Section
(n, γ)



130

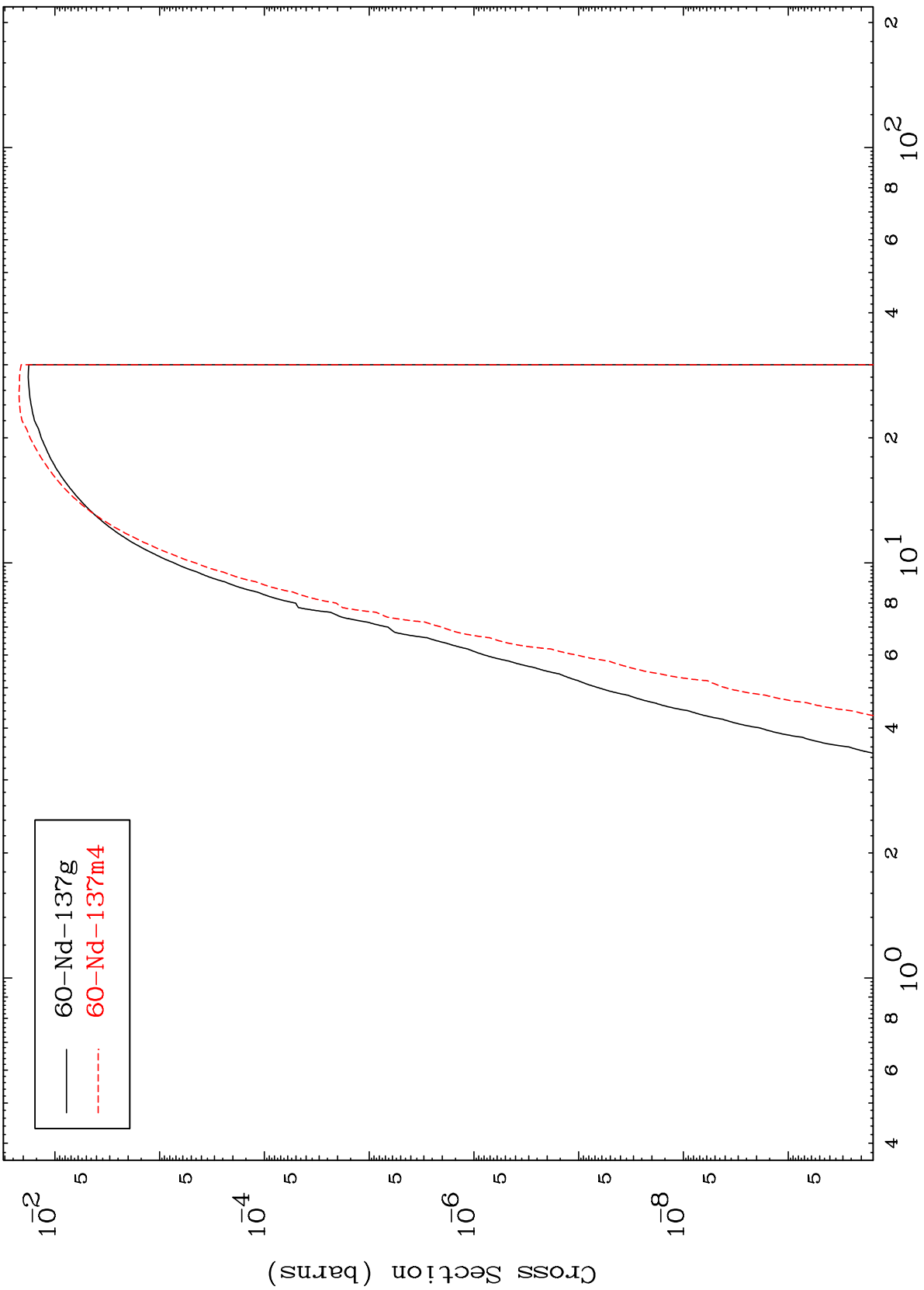
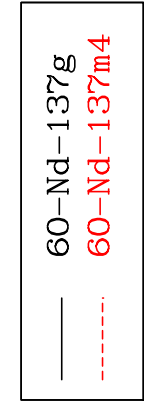
61-Pm-138

MAT 6122

(n,d)

61-Pm-138

Radionuclide Production Cross Section



131

Incident Energy (MeV)

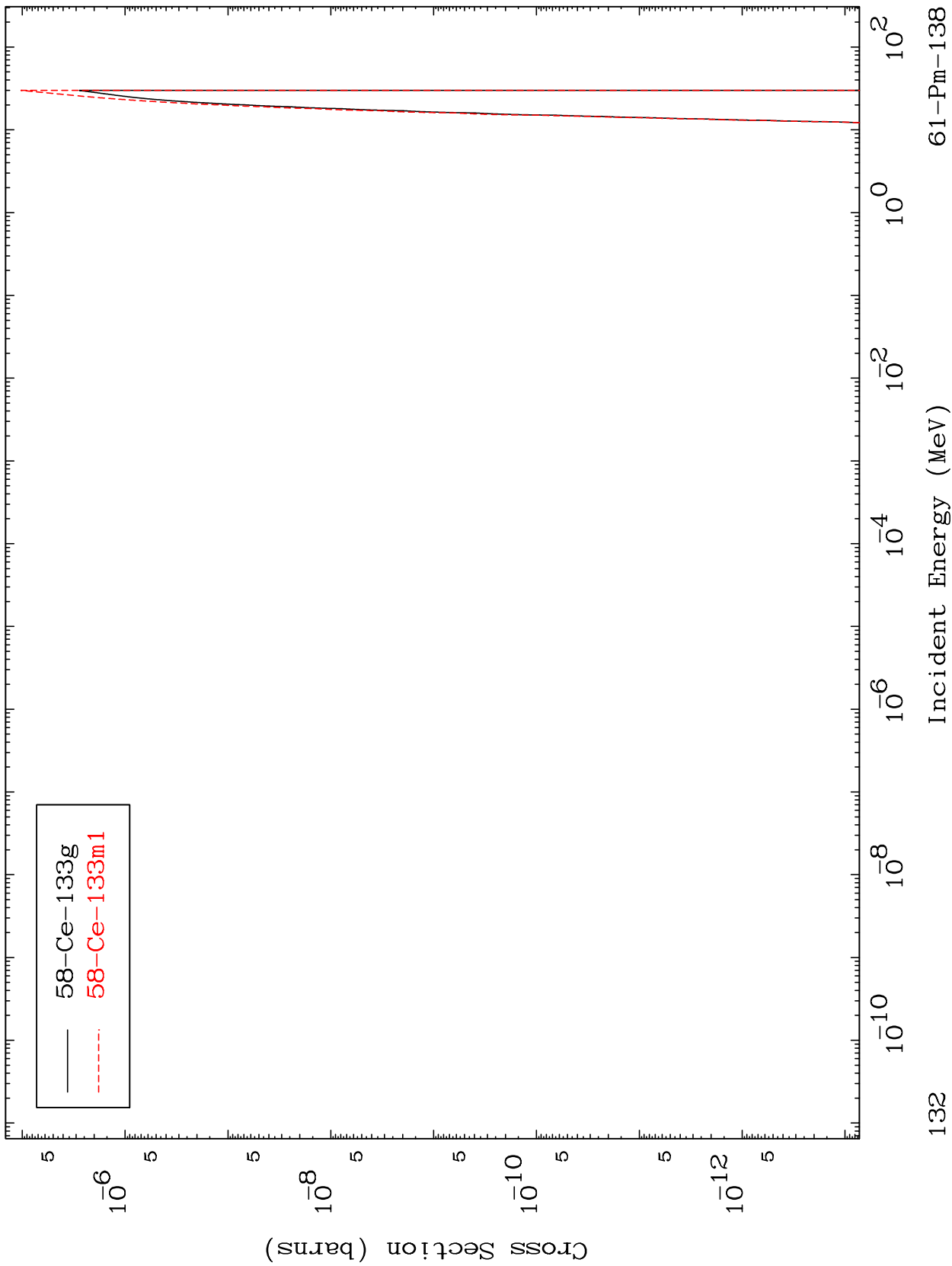
61-Pm-138

MAT 6122

(n,d) α

61-Pm-138

Radionuclide Production Cross Section



132

Incident Energy (MeV)

61-Pm-138