

Program EVALPLOT
(Version 2021-1)

by

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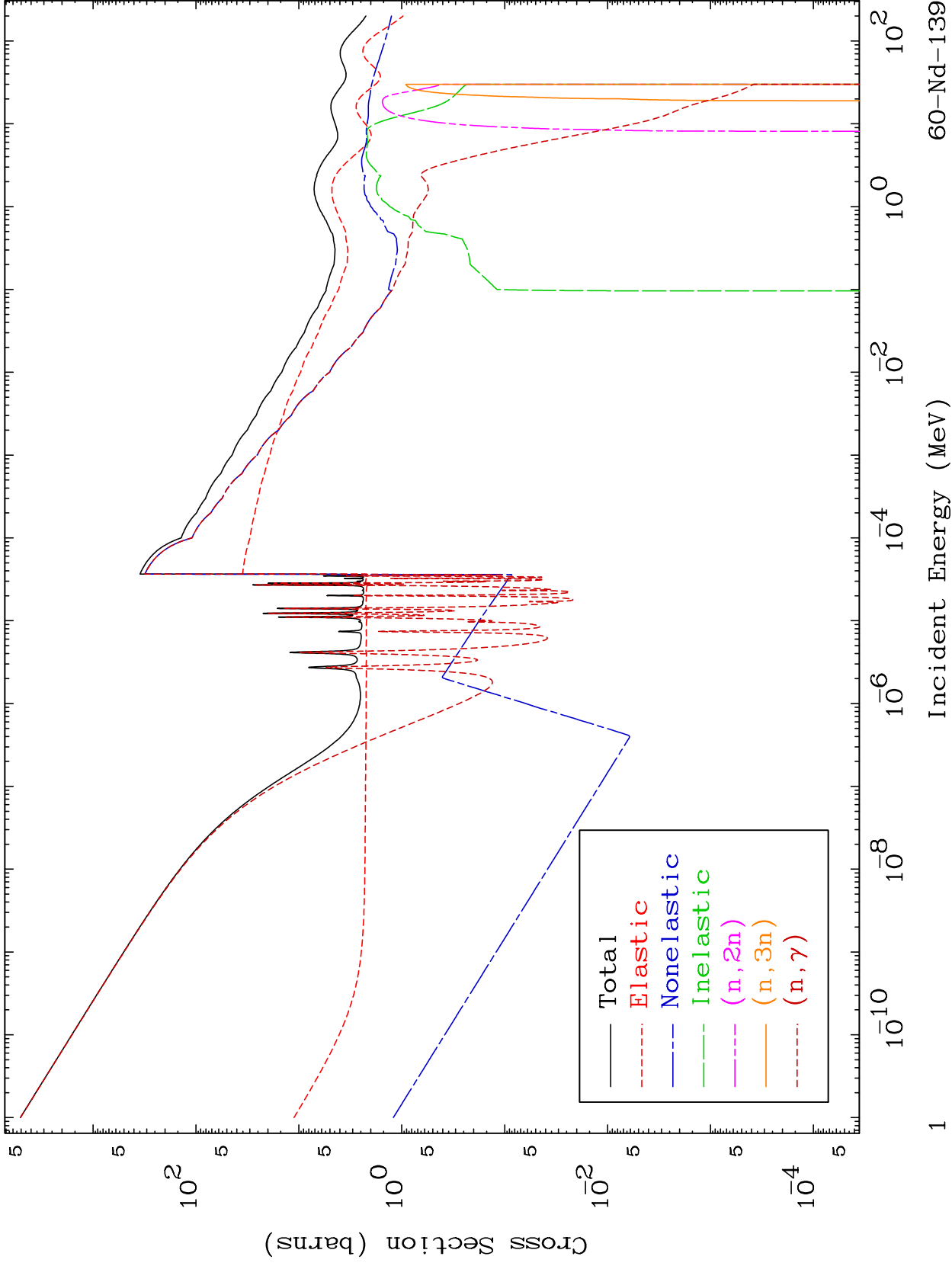
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 6016

Neutron Major
293 Kelvin Cross Sections

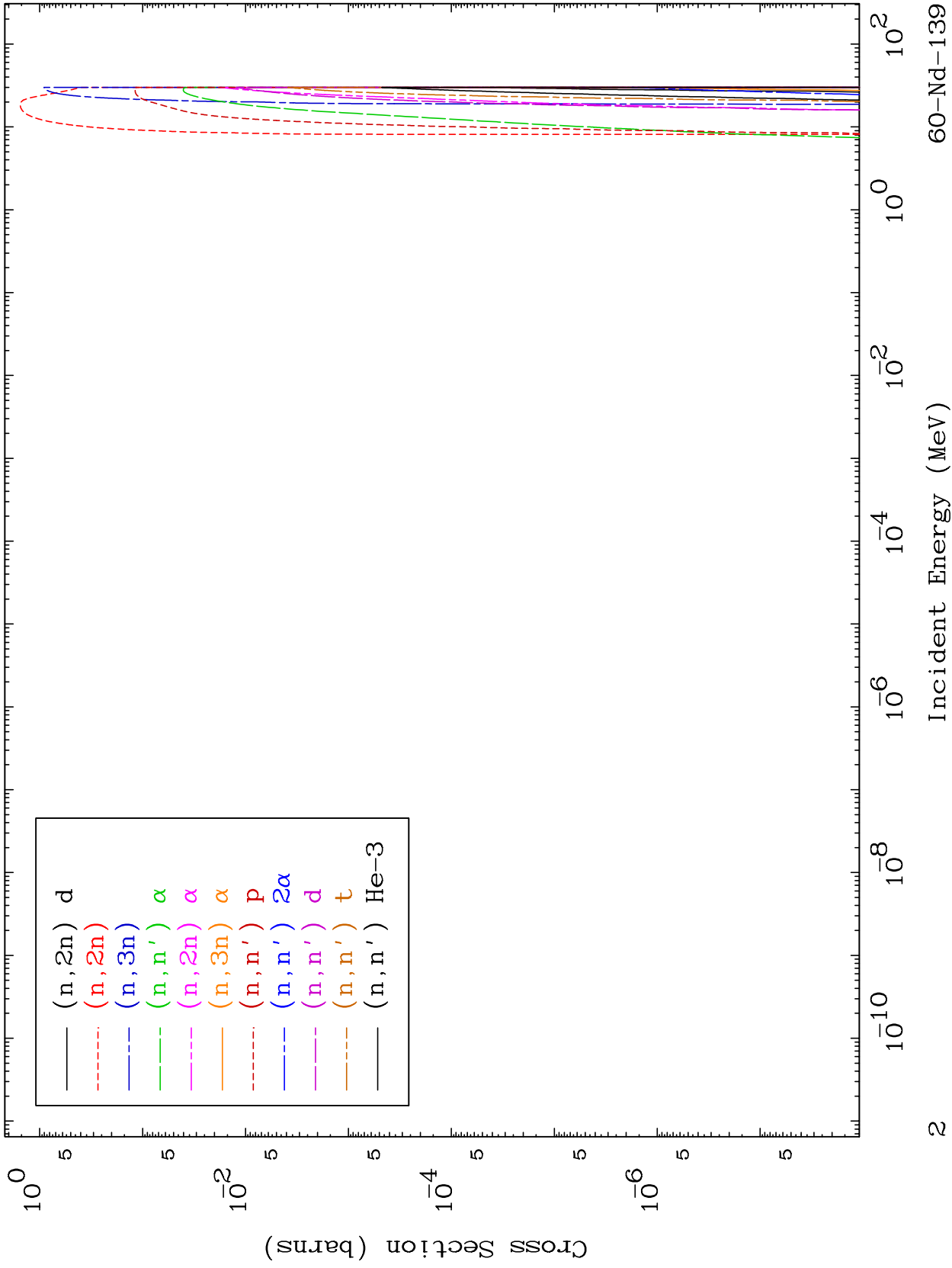
60-Nd-139



MAT 6016

Neutron Absorption
293 Kelvin Cross Sections

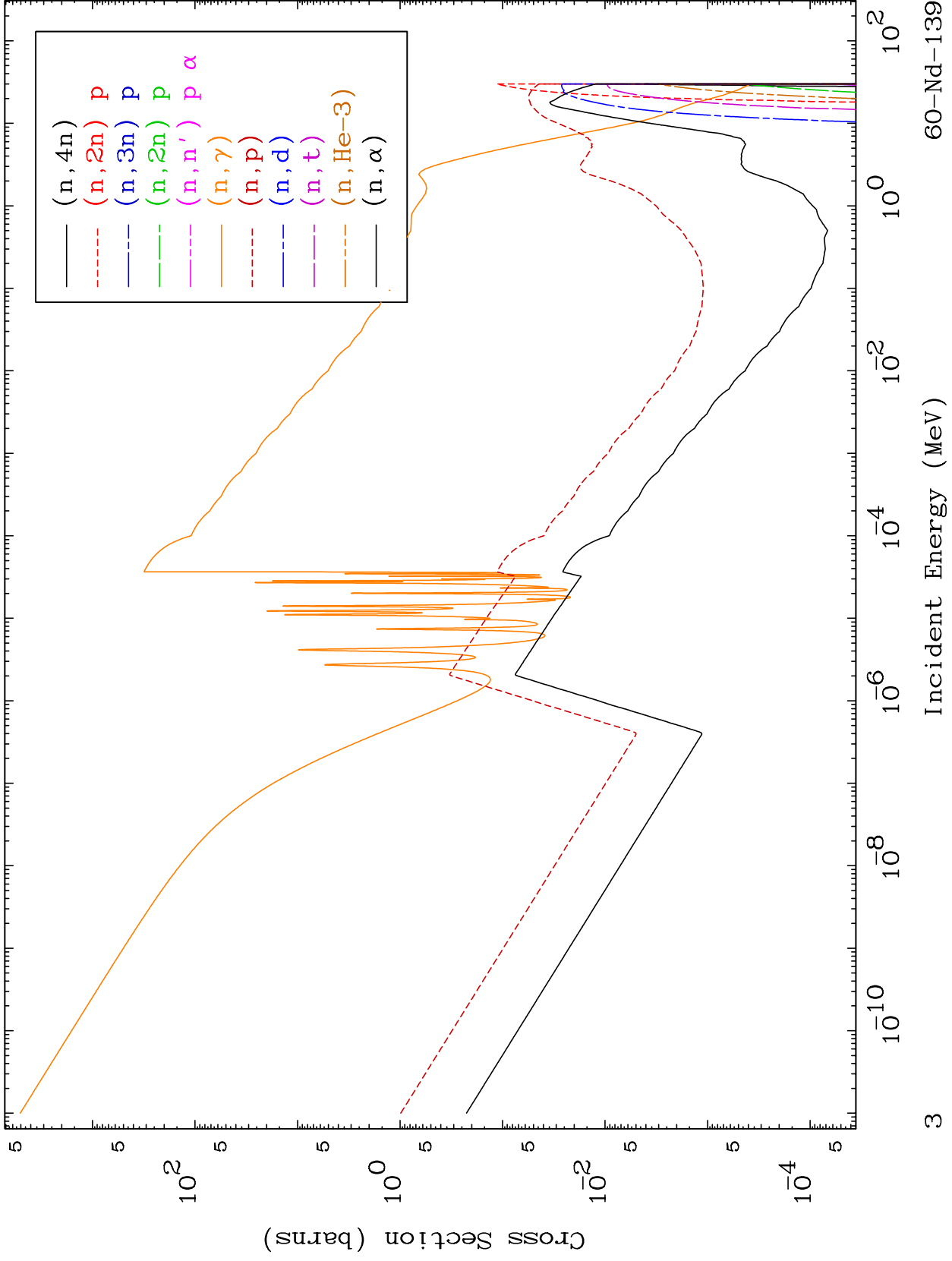
60-Nd-139

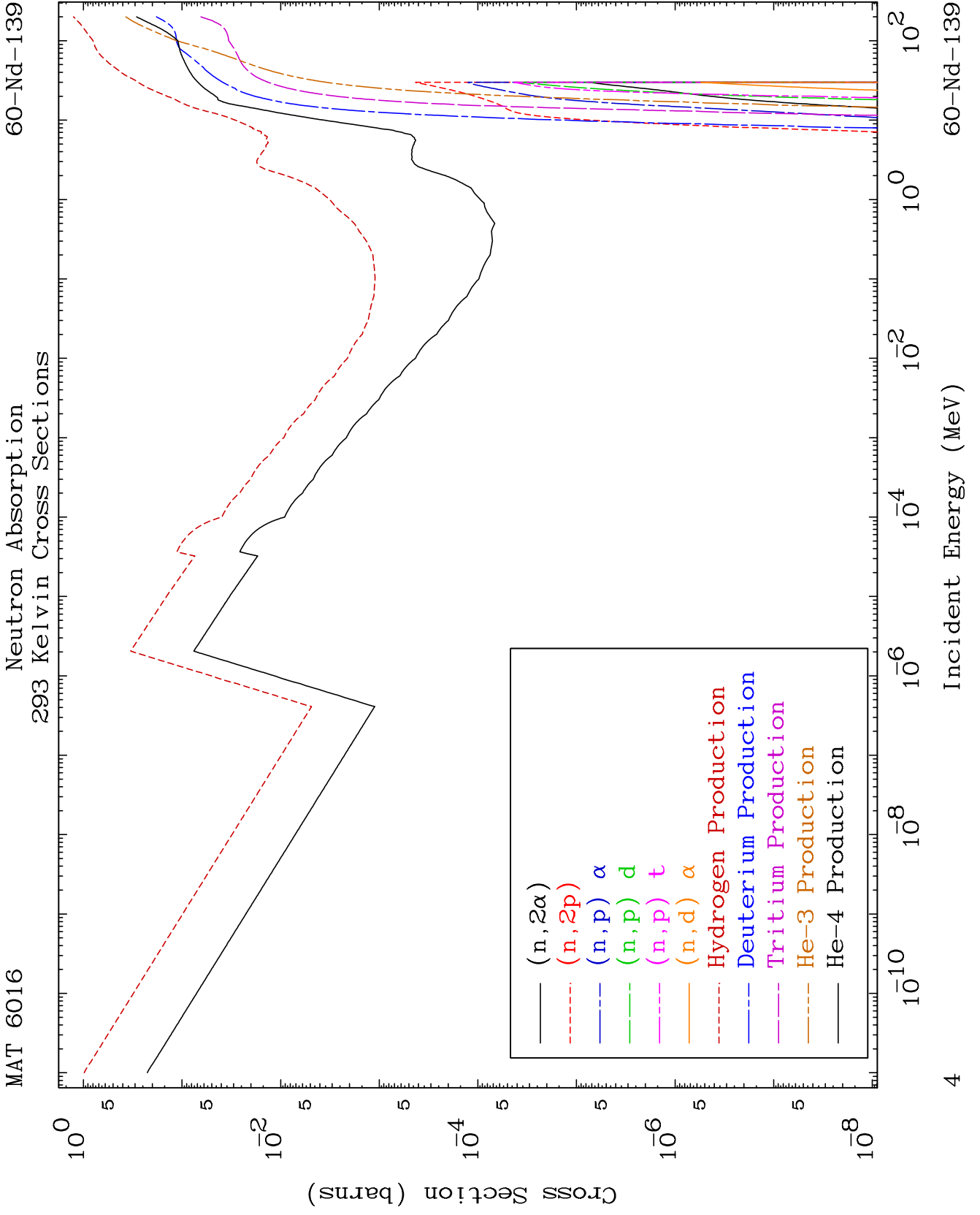


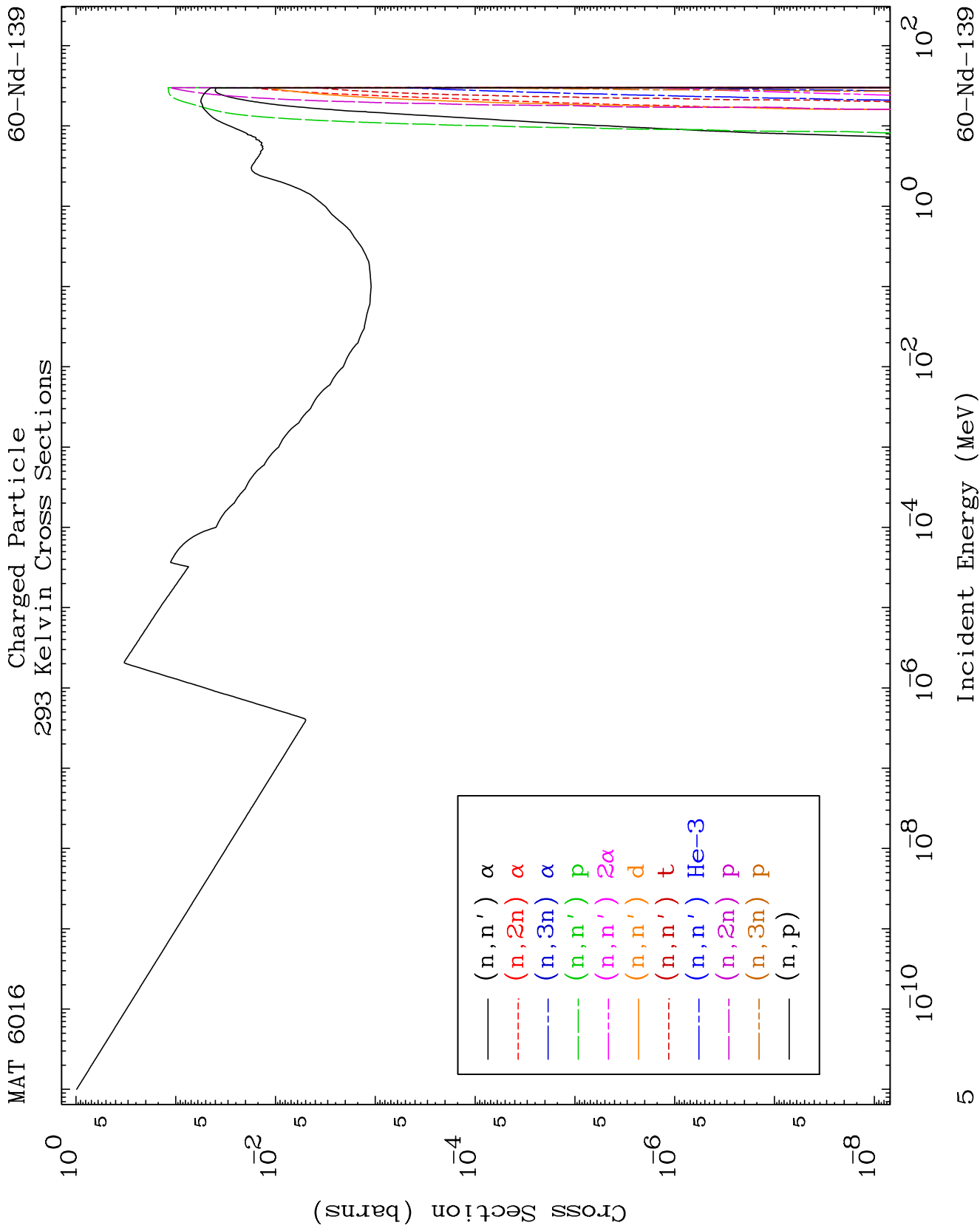
MAT 6016

Neutron Absorption
293 Kelvin Cross Sections

60-Nd-139



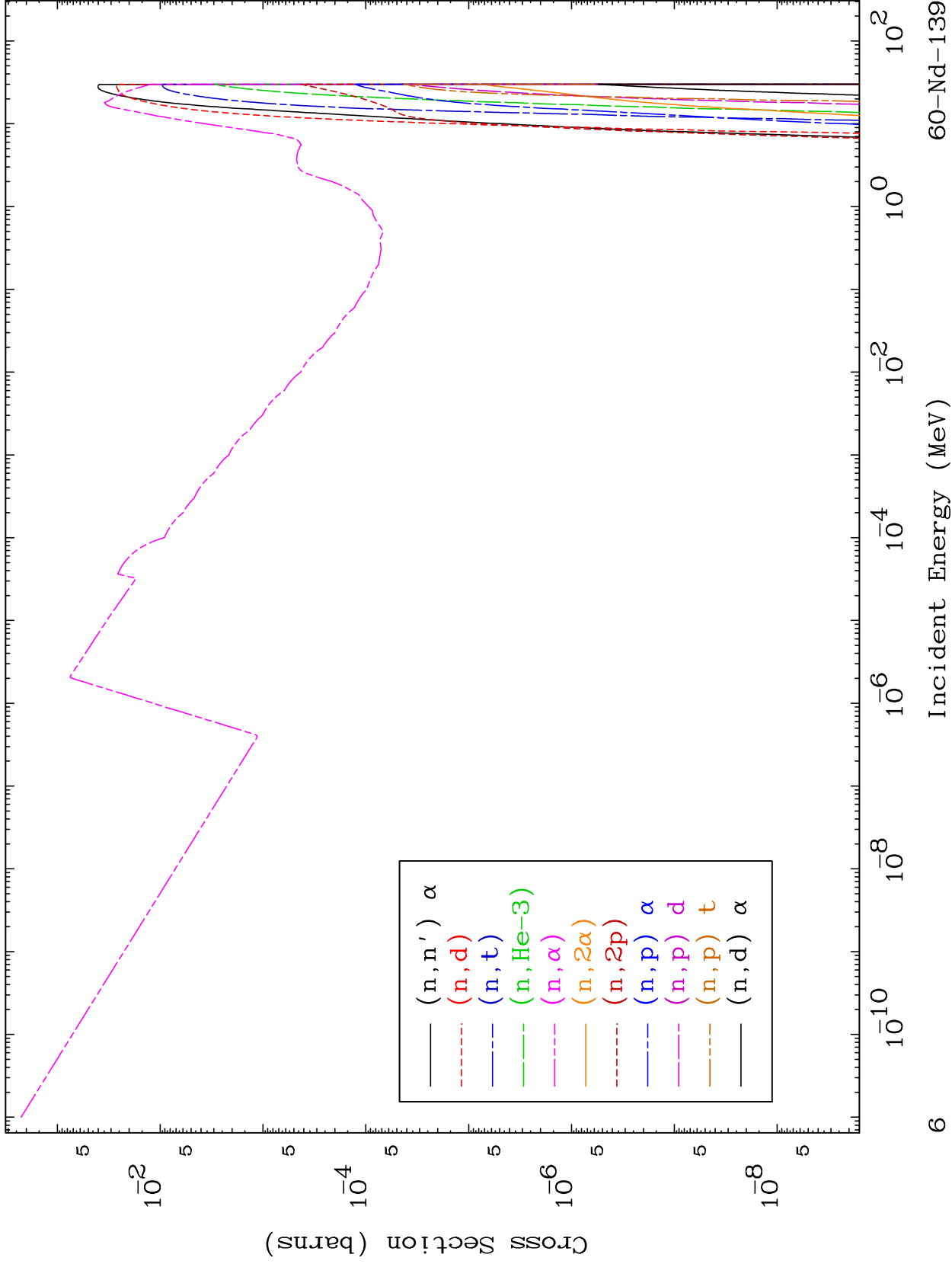




MAT 6016

Charged Particle
293 Kelvin Cross Sections

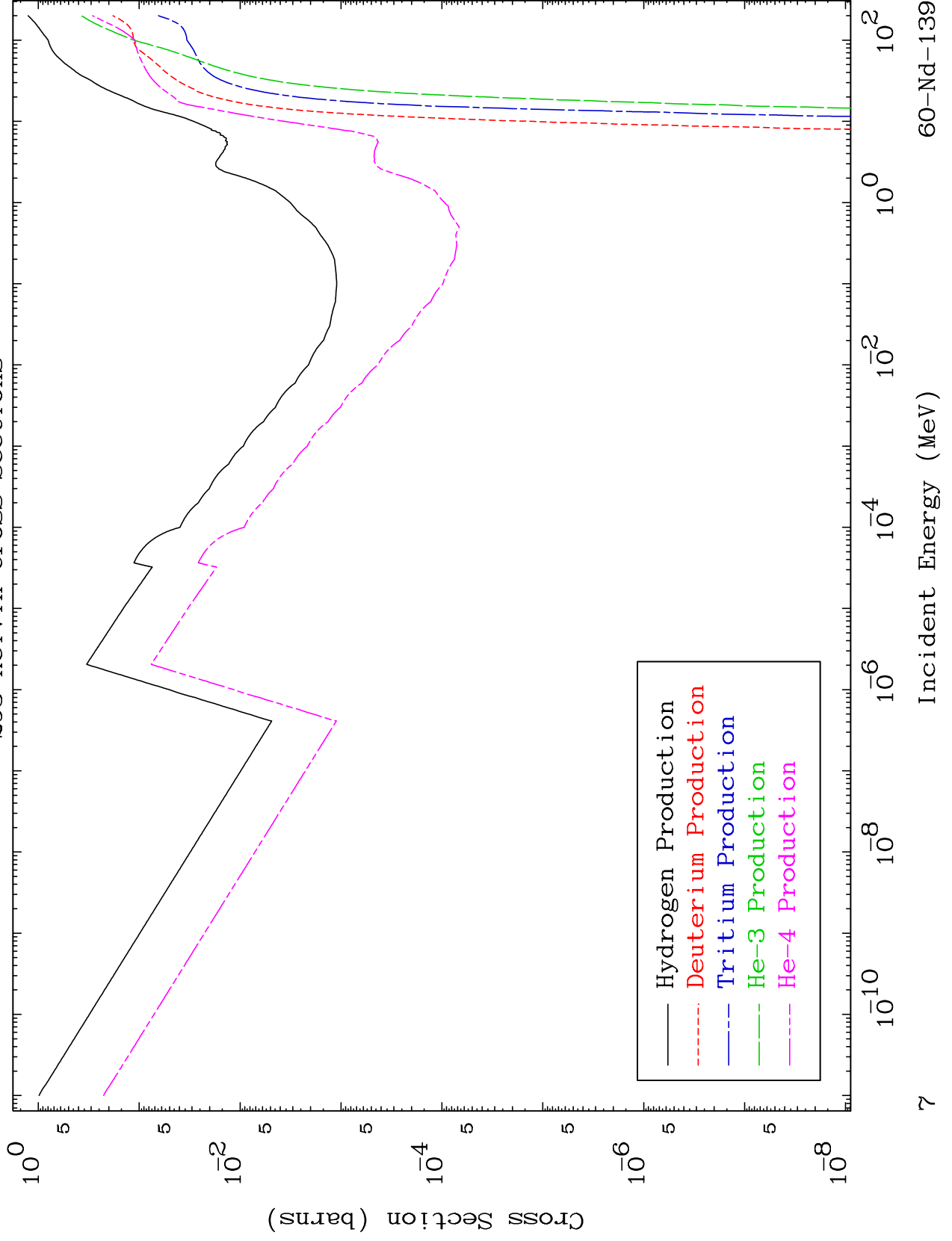
60-Nd-139



MAT 6016

Particle Production
293 Kelvin Cross Sections

60-Nd-139

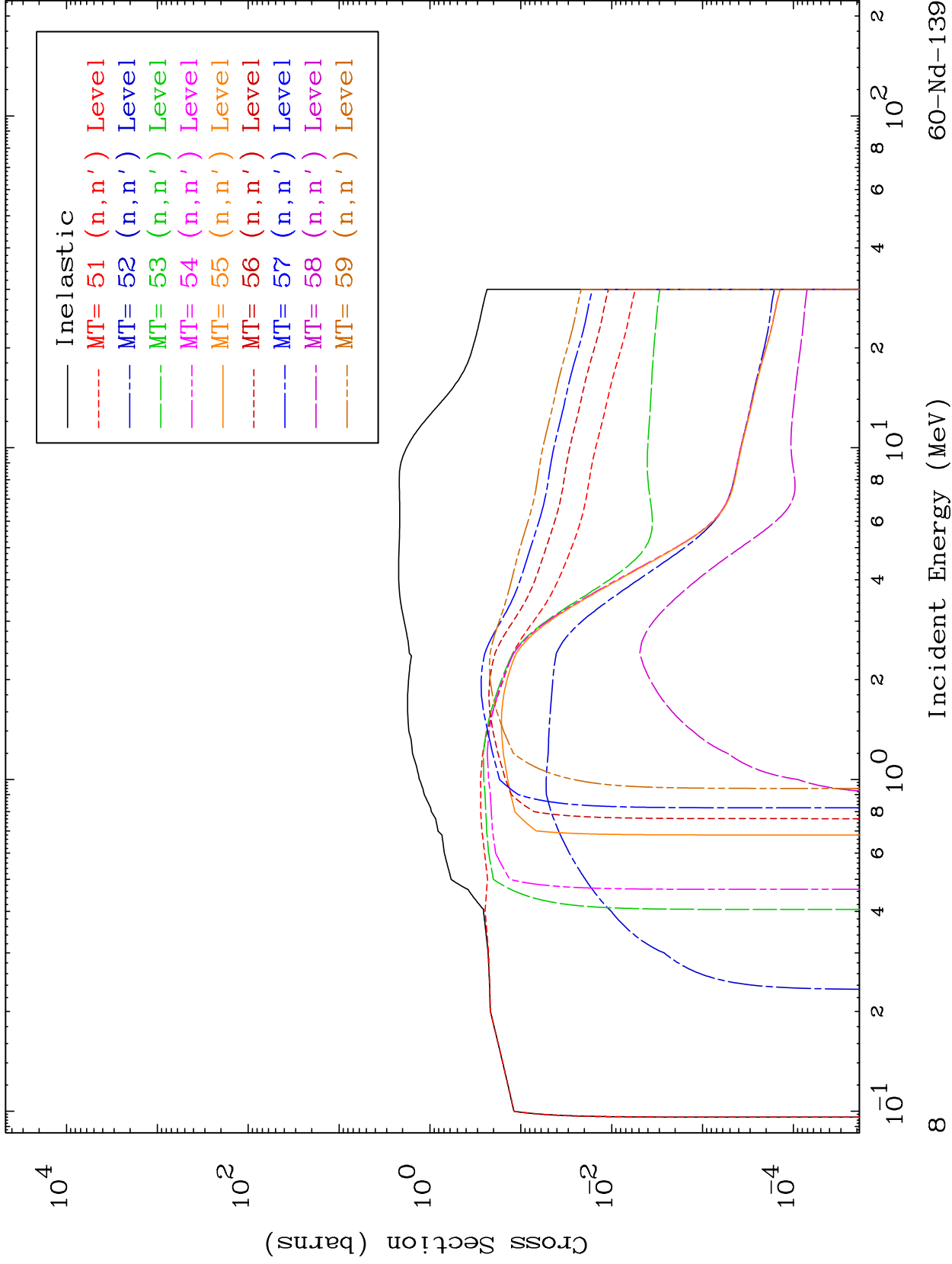


MAT 6016

(n,n') Levels

60-Nd-139

293 Kelvin Cross Sections



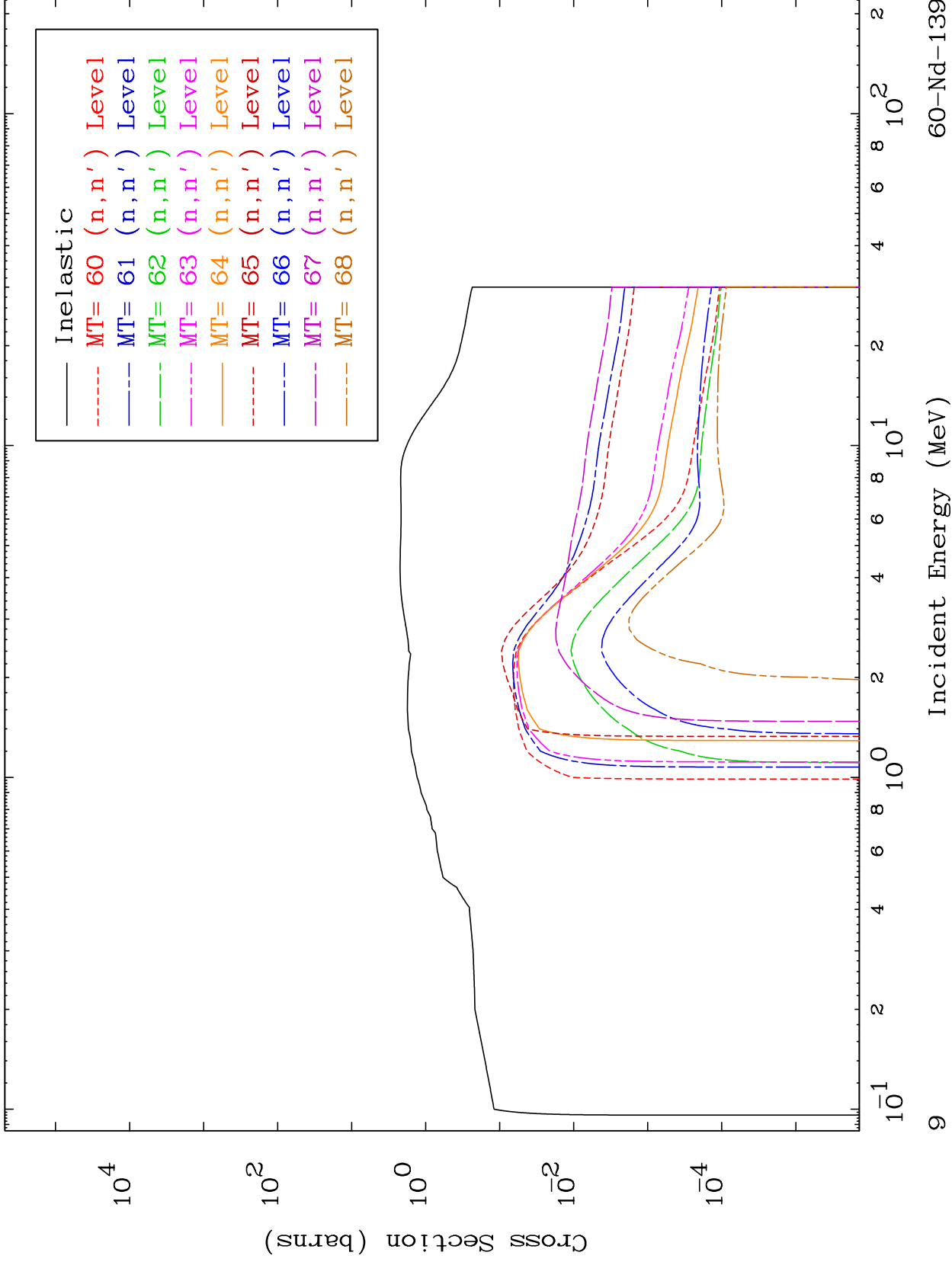
8

MAT 6016

(n,n') Levels

60-Nd-139

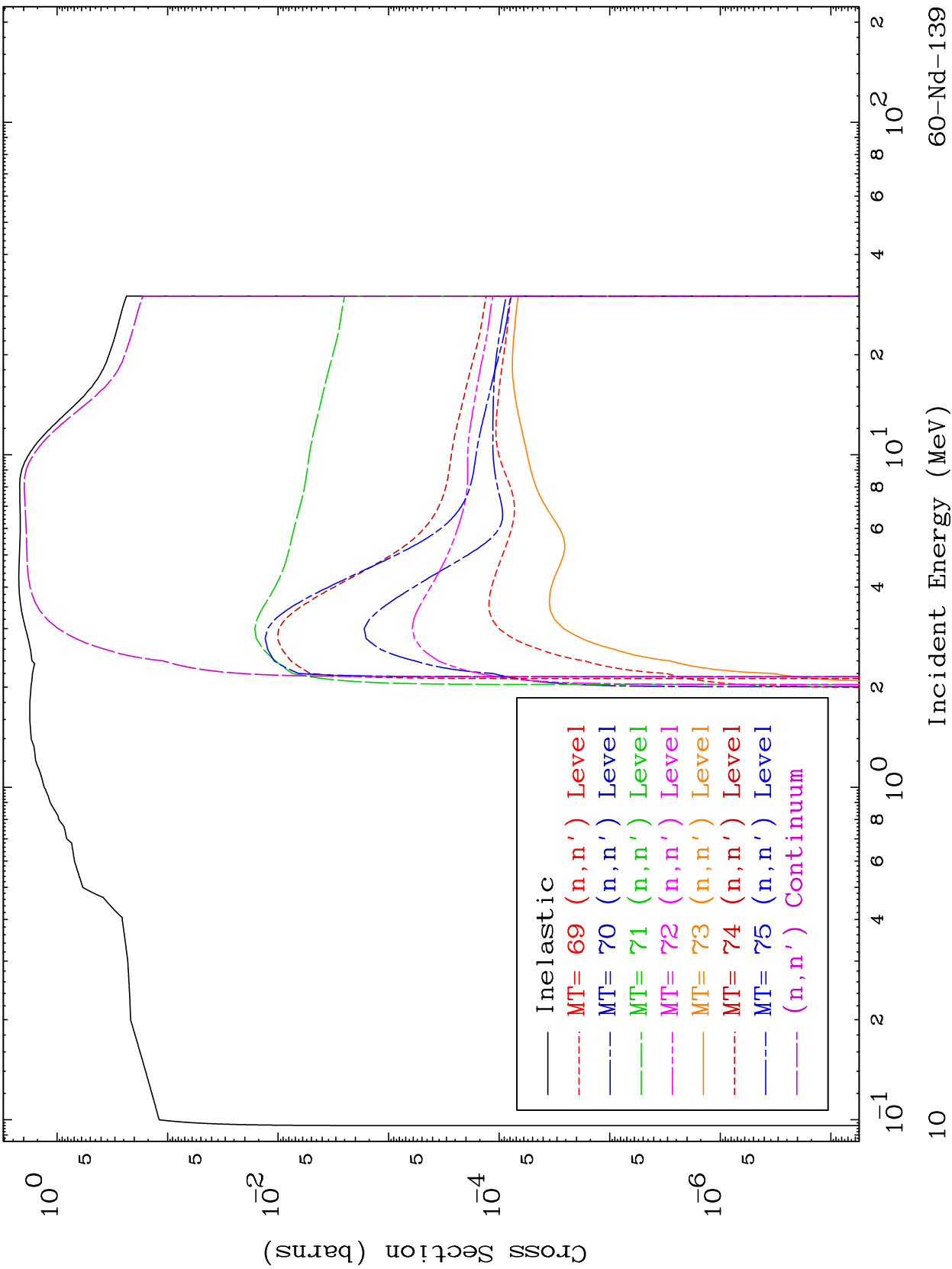
293 Kelvin Cross Sections



MAT 6016

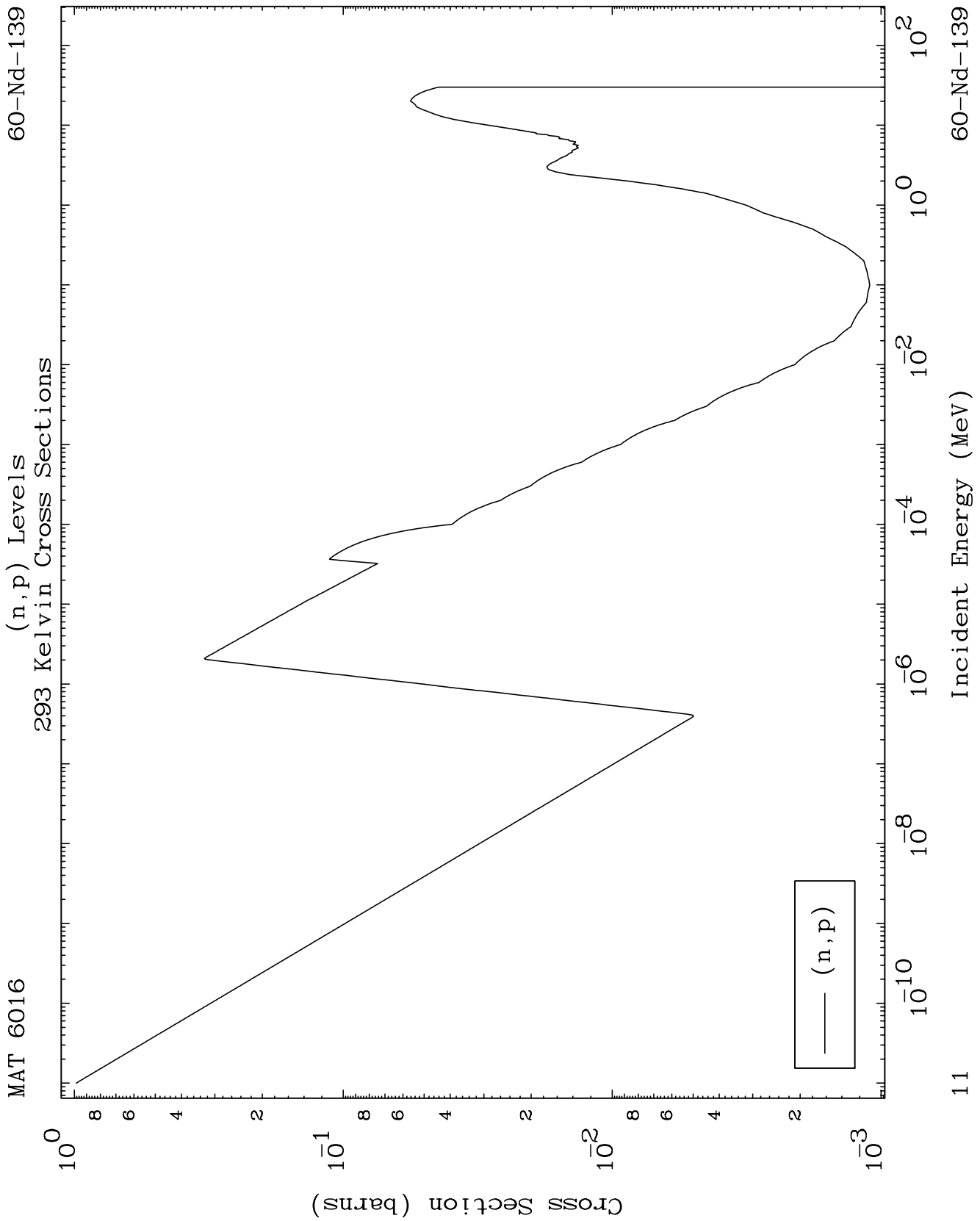
60-Nd-139

293 Kelvin Cross Sections
(n,n') Levels



60-Nd-139

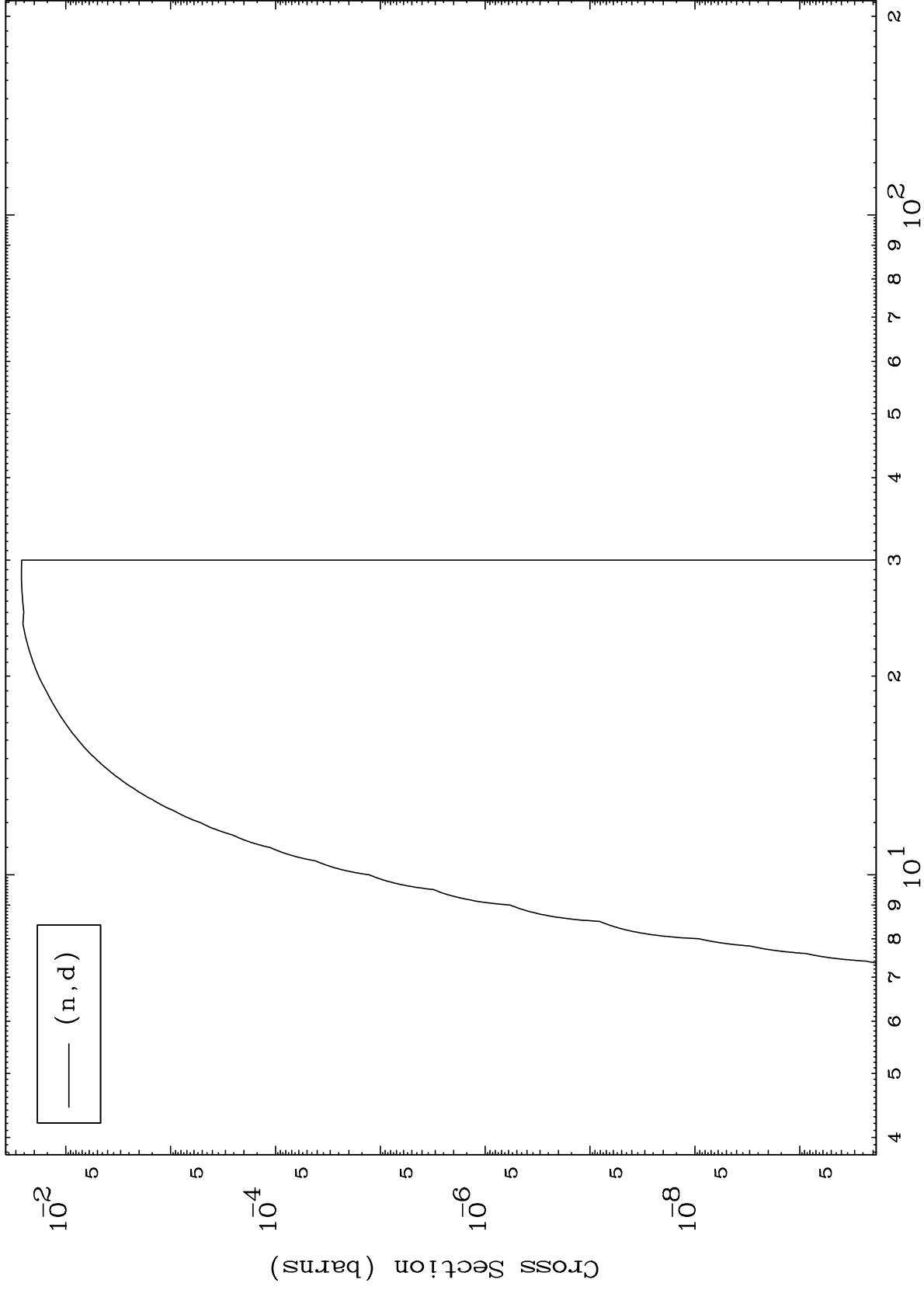
Incident Energy (MeV)



MAT 6016

(n,d) Levels
293 Kelvin Cross Sections

60-Nd-139



12

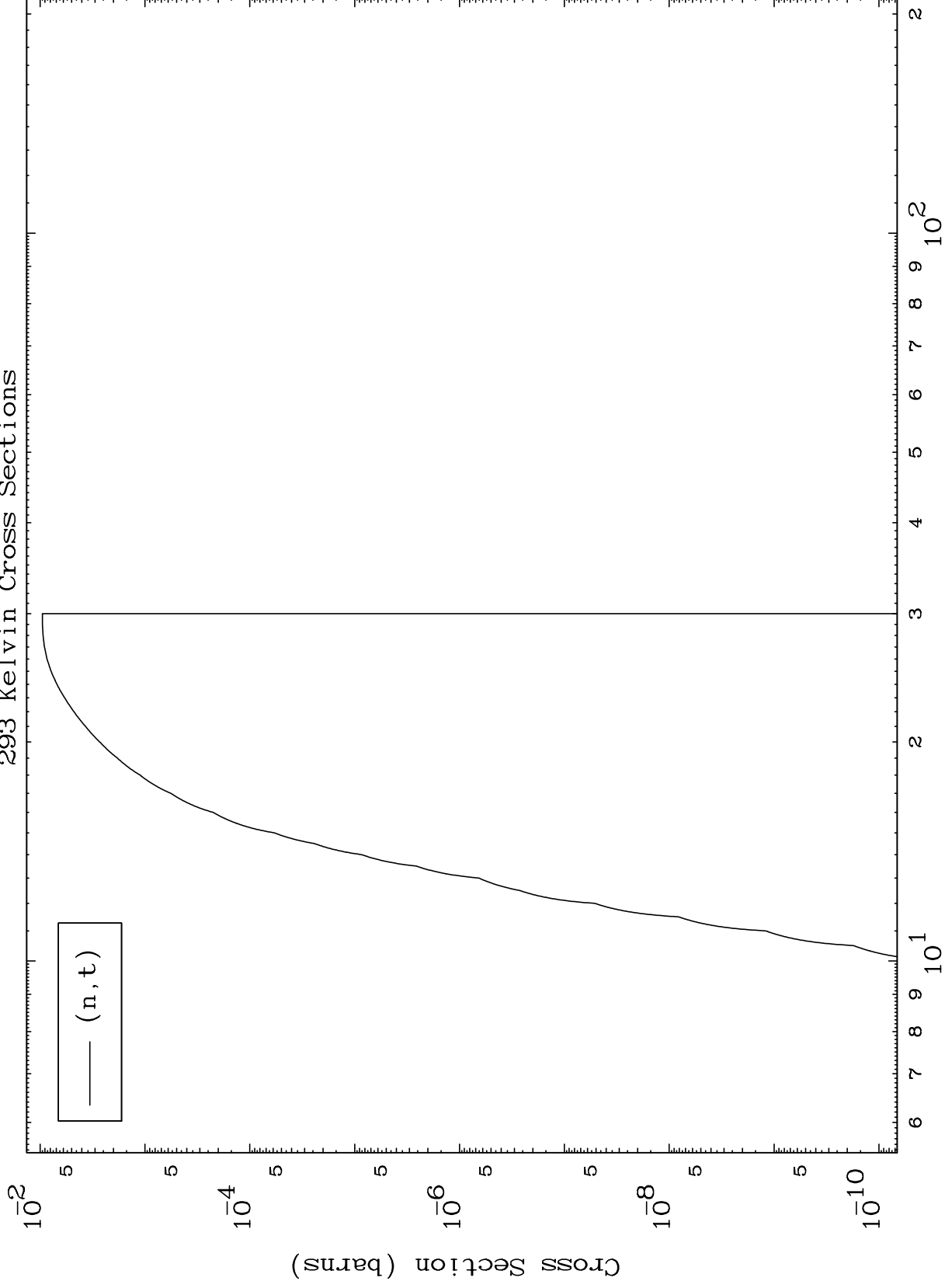
Incident Energy (MeV)

60-Nd-139

MAT 6016

(n,t) Levels
293 Kelvin Cross Sections

60-Nd-139



13

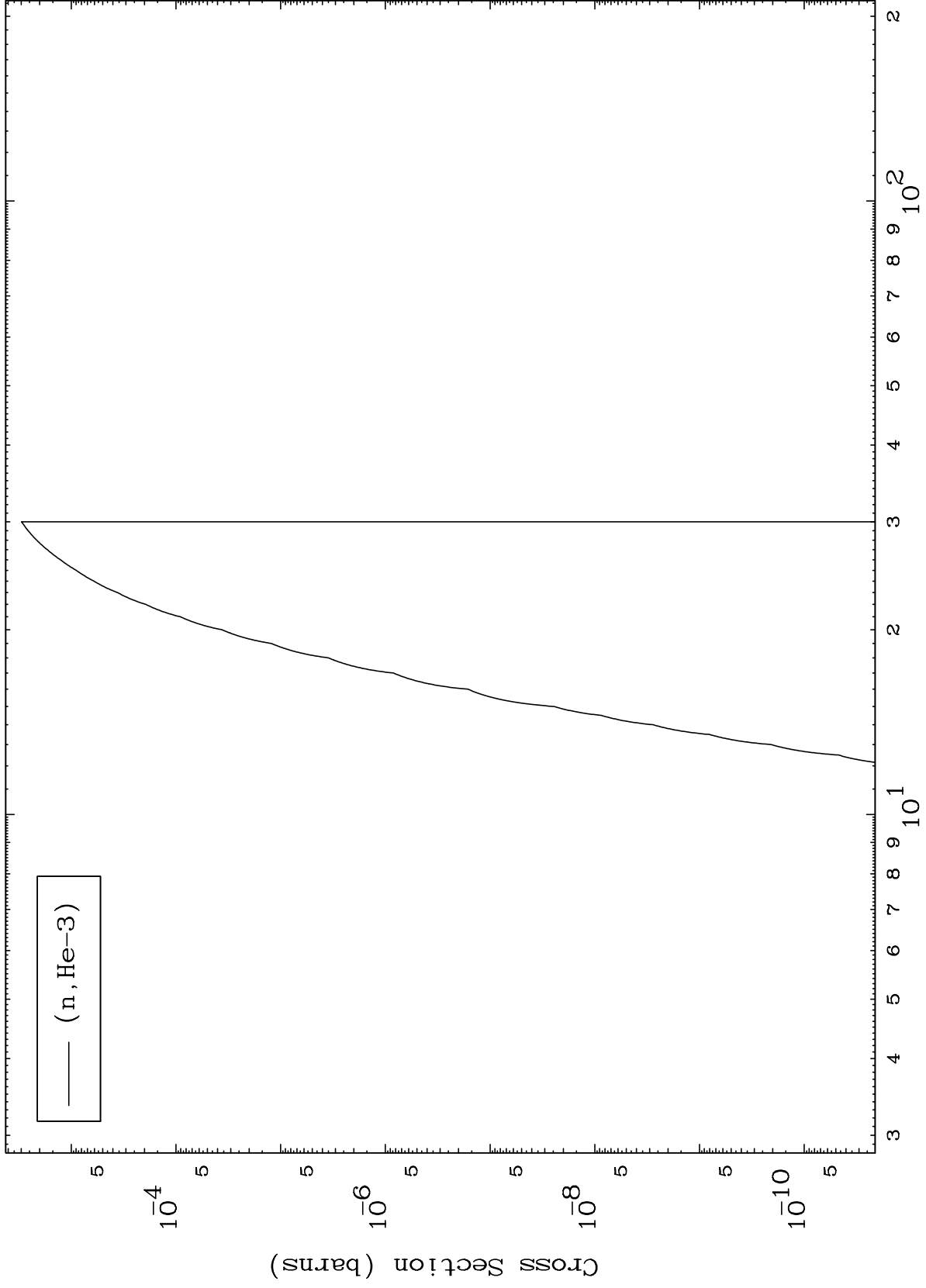
Incident Energy (MeV)

60-Nd-139

MAT 6016

(n,He3) Levels
293 Kelvin Cross Sections

60-Nd-139



14

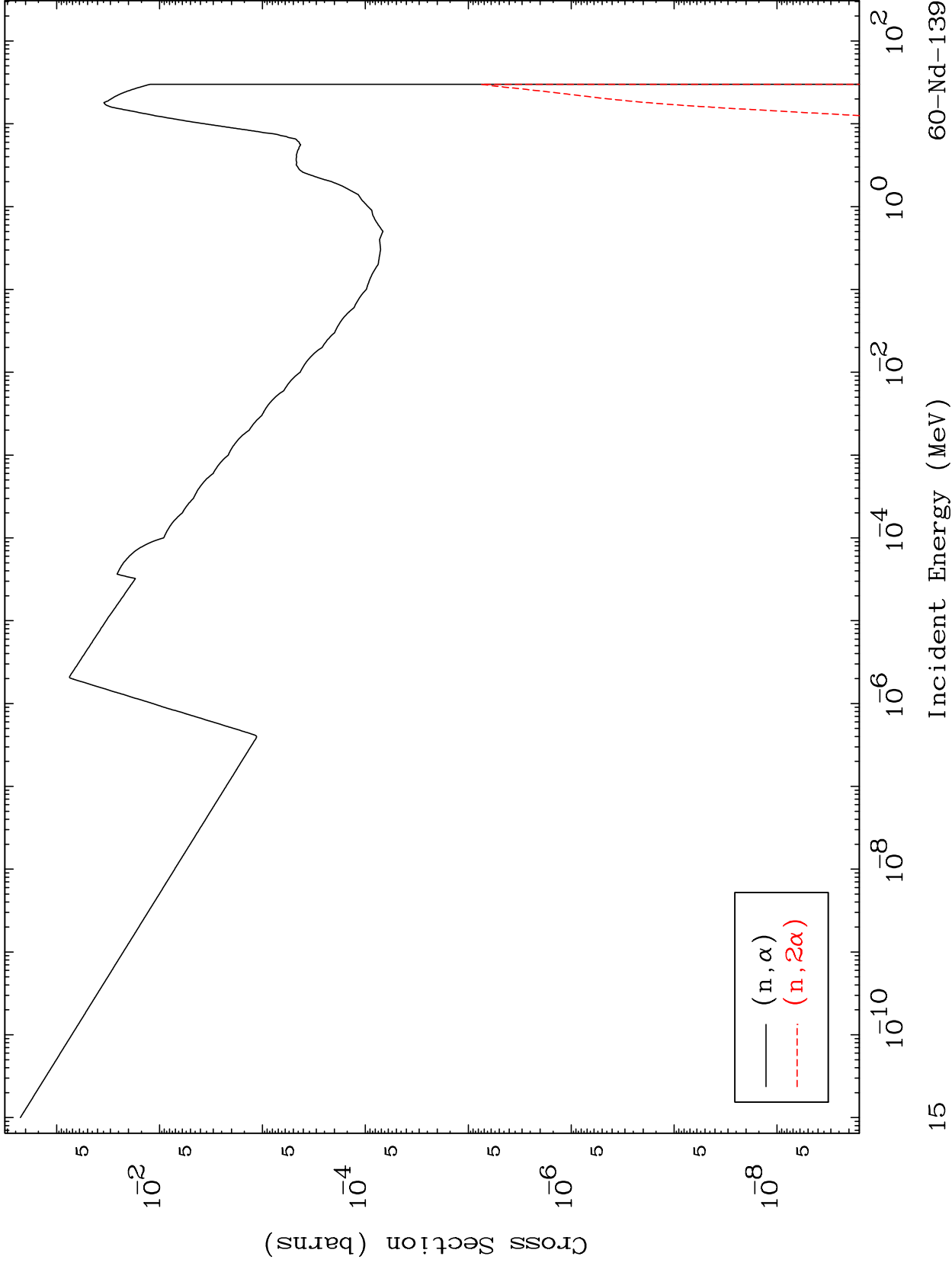
Incident Energy (MeV)

60-Nd-139

MAT 6016

(n, α) Levels
293 Kelvin Cross Sections

60-Nd-139

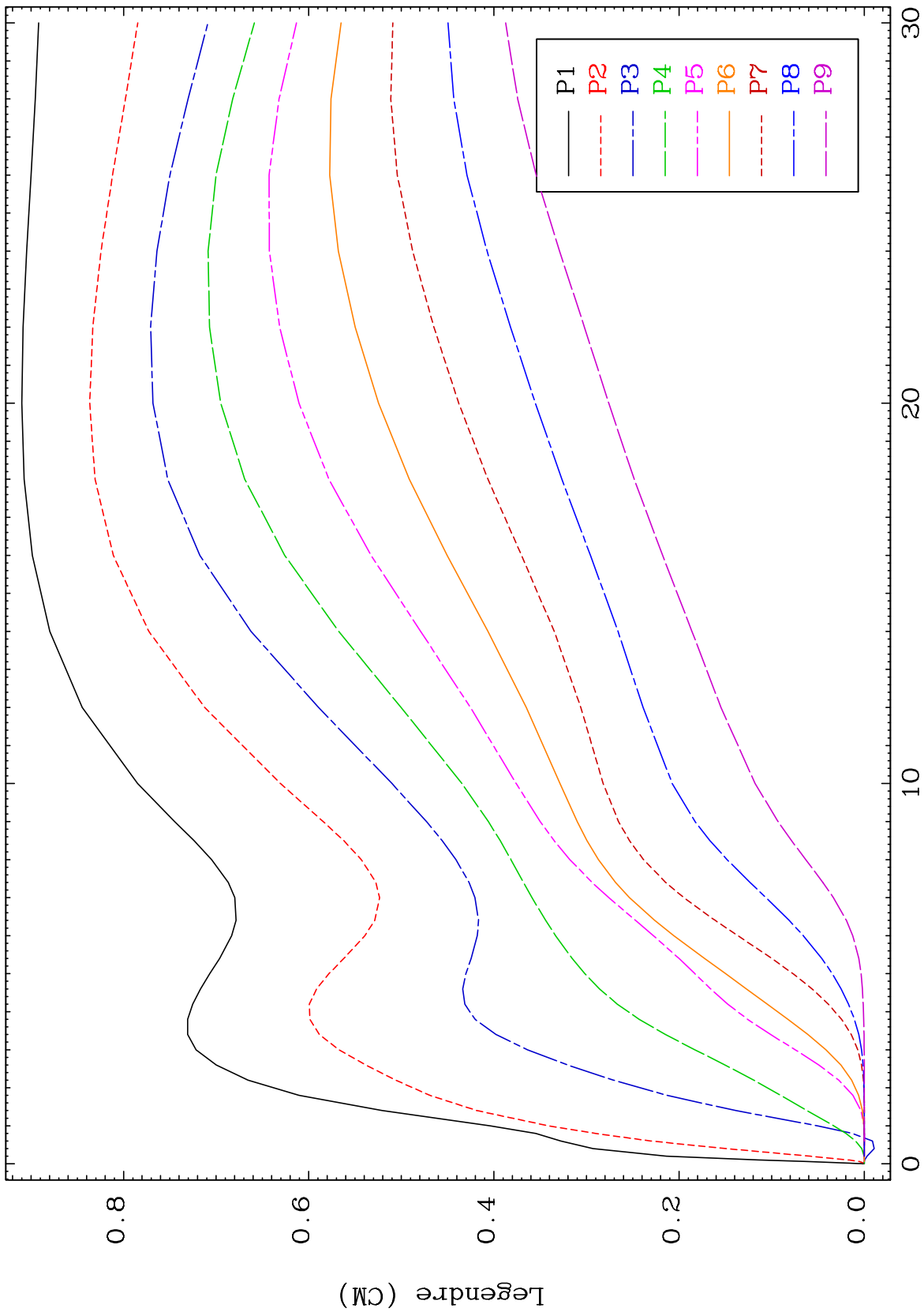


15

MAT 6016

60-Nd-139

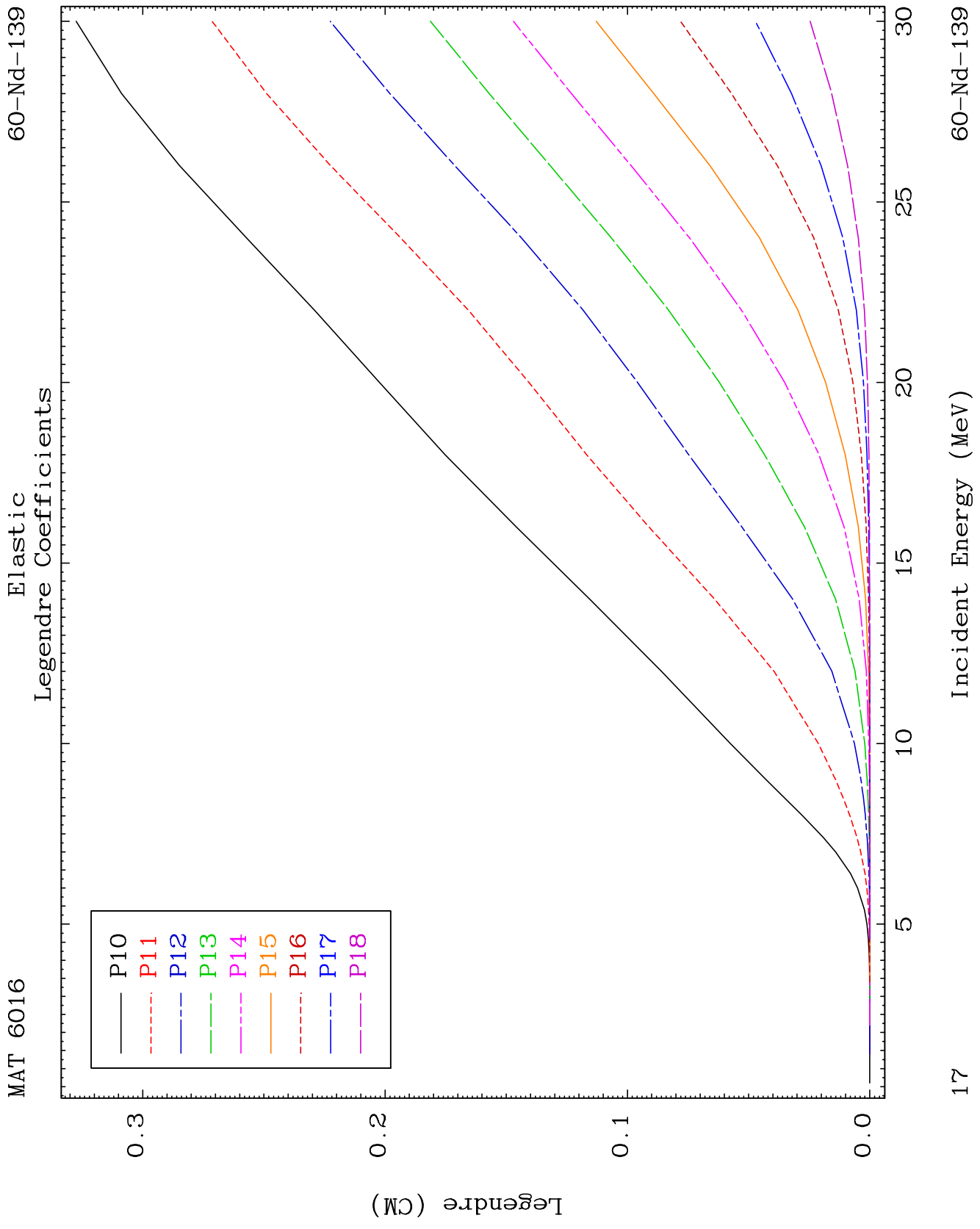
Elastic Legendre Coefficients



16

Incident Energy (MeV)

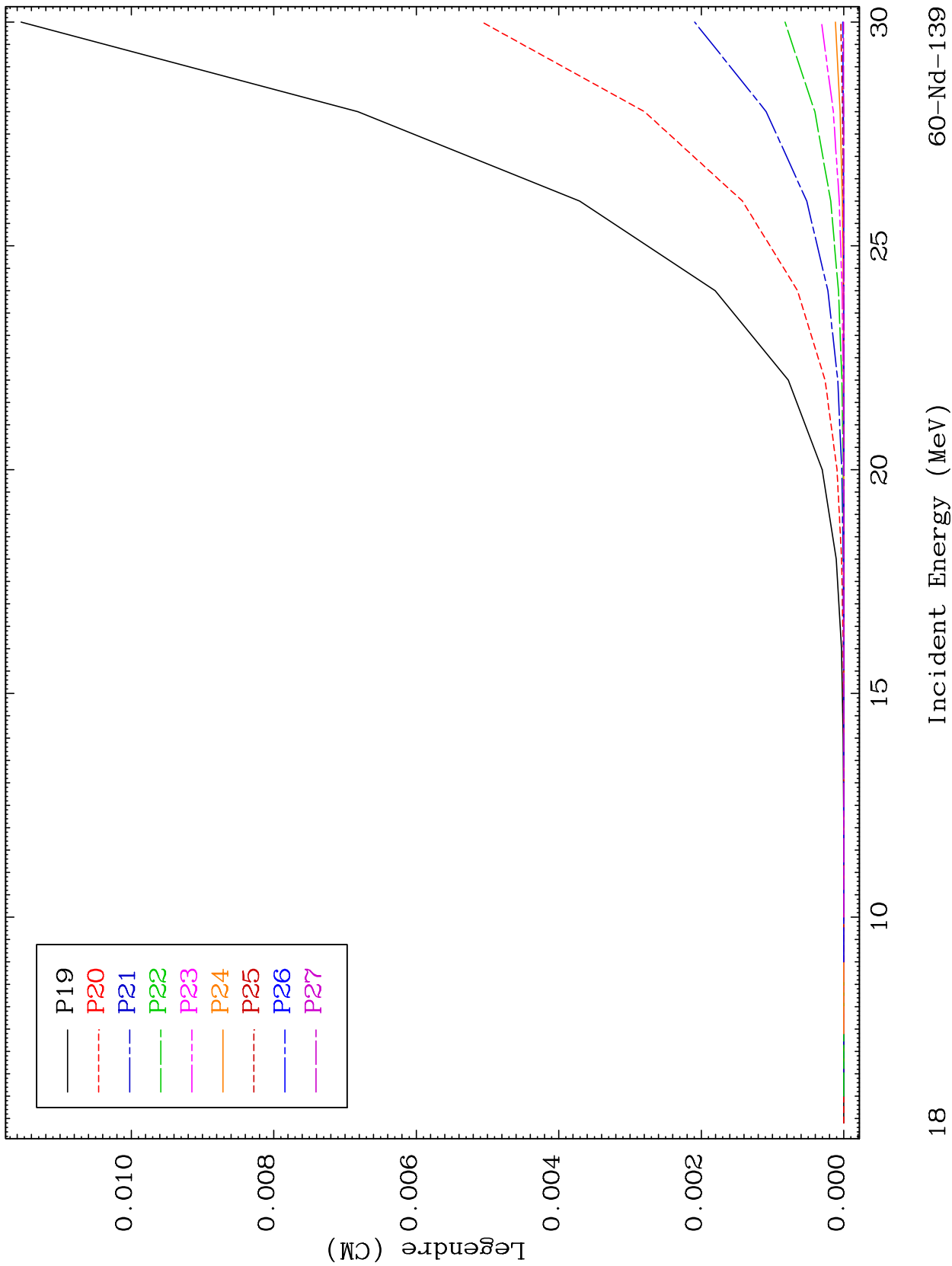
60-Nd-139



MAT 6016

Elastic Legendre Coefficients

60-Nd-139



18

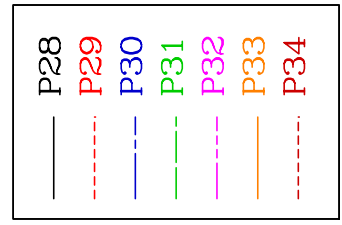
Incident Energy (MeV)

60-Nd-139

MAT 6016

Elastic Legendre Coefficients

60-Nd-139



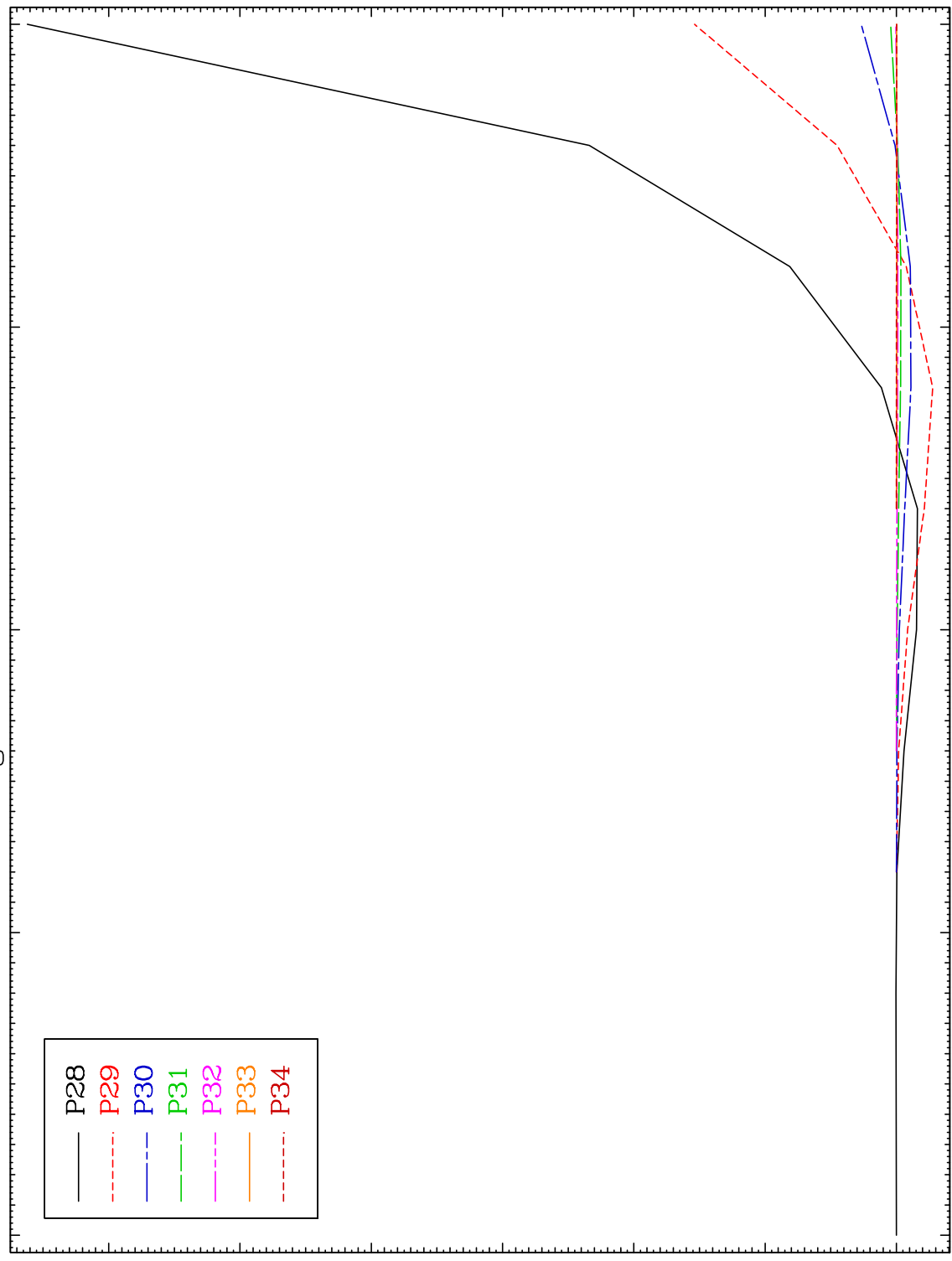
$\times 10^{-6}$
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1.0
0.8
0.6
0.4
0.2
0.0

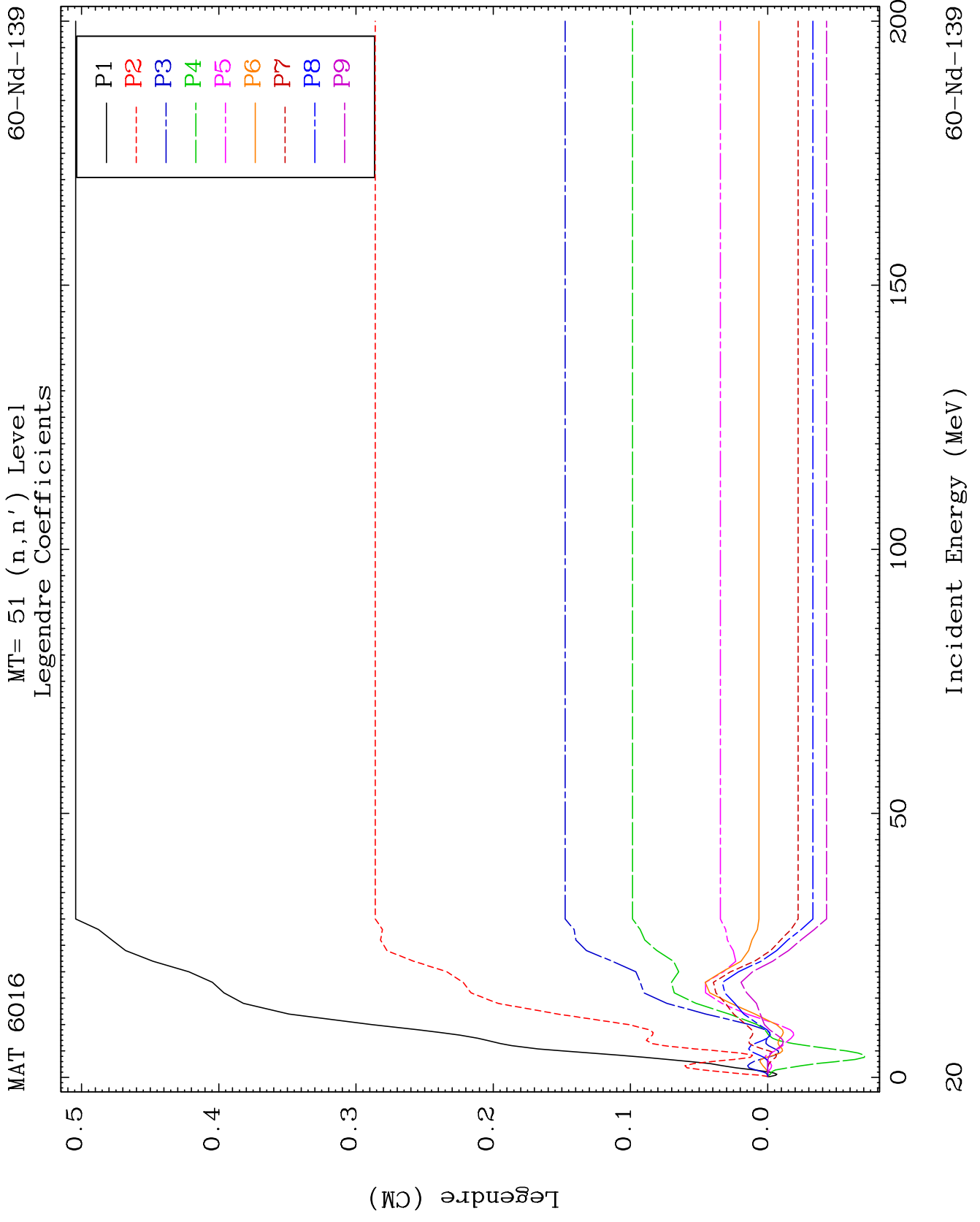
Legendre (CM)

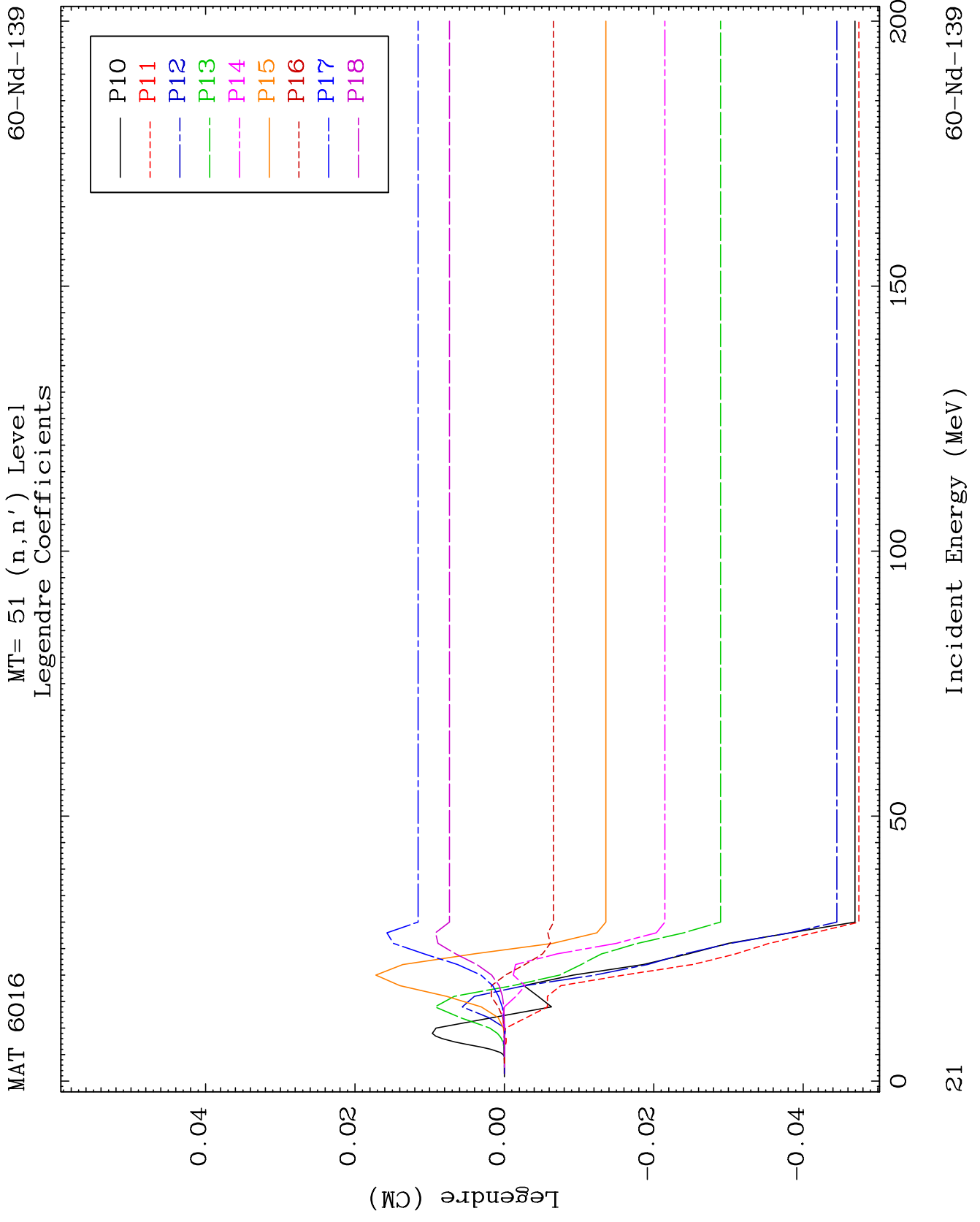
10 15 20 25 30

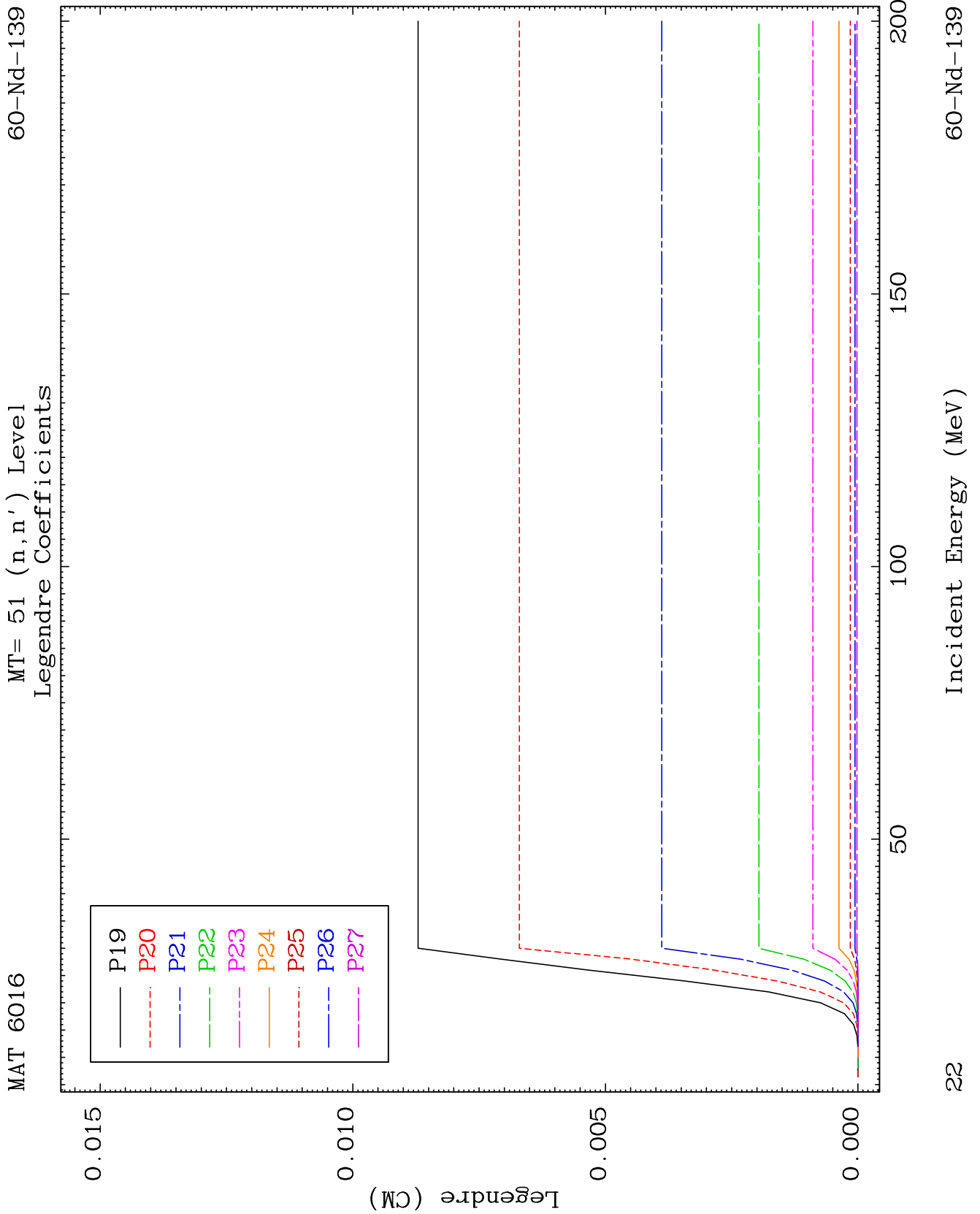
Incident Energy (MeV)

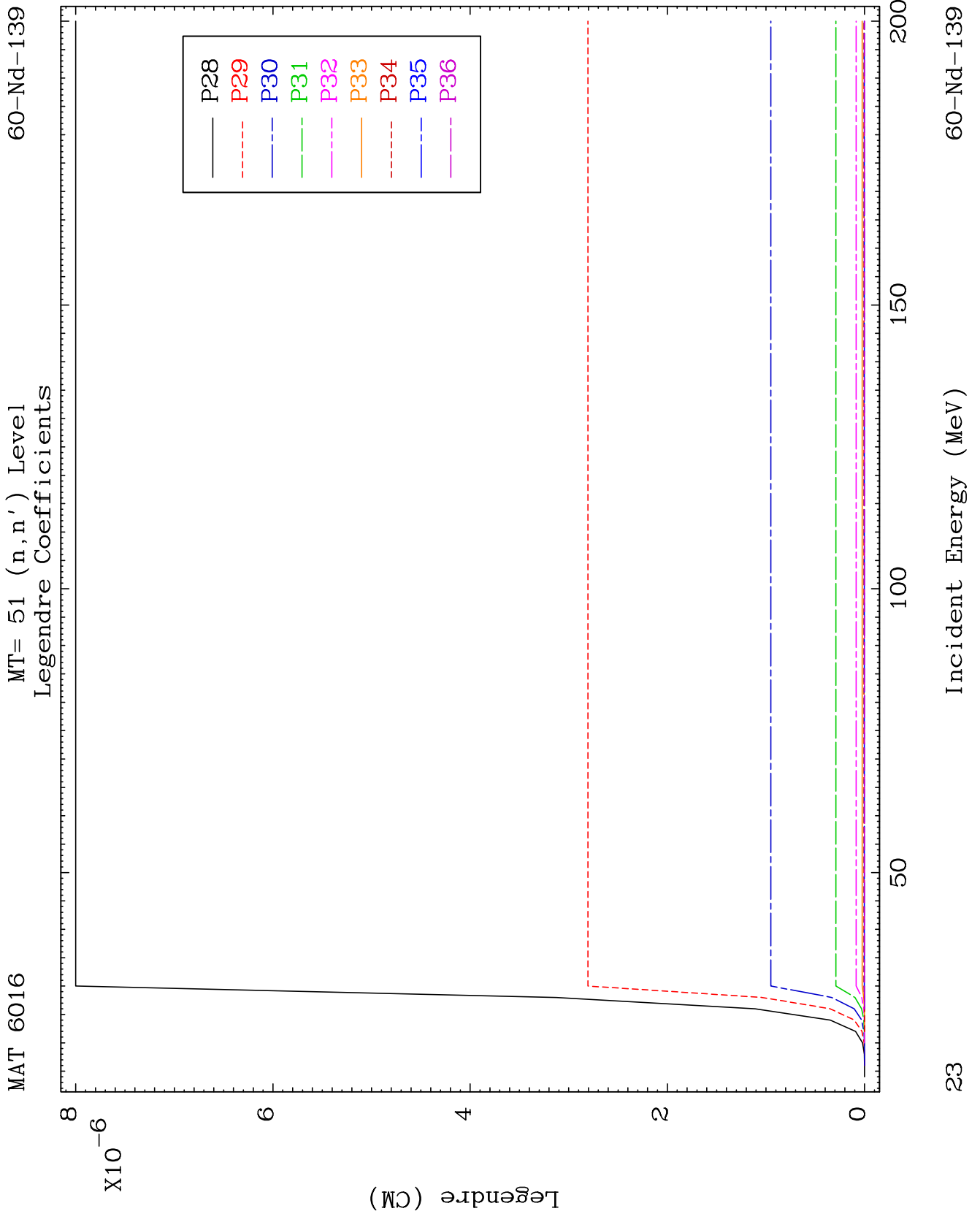
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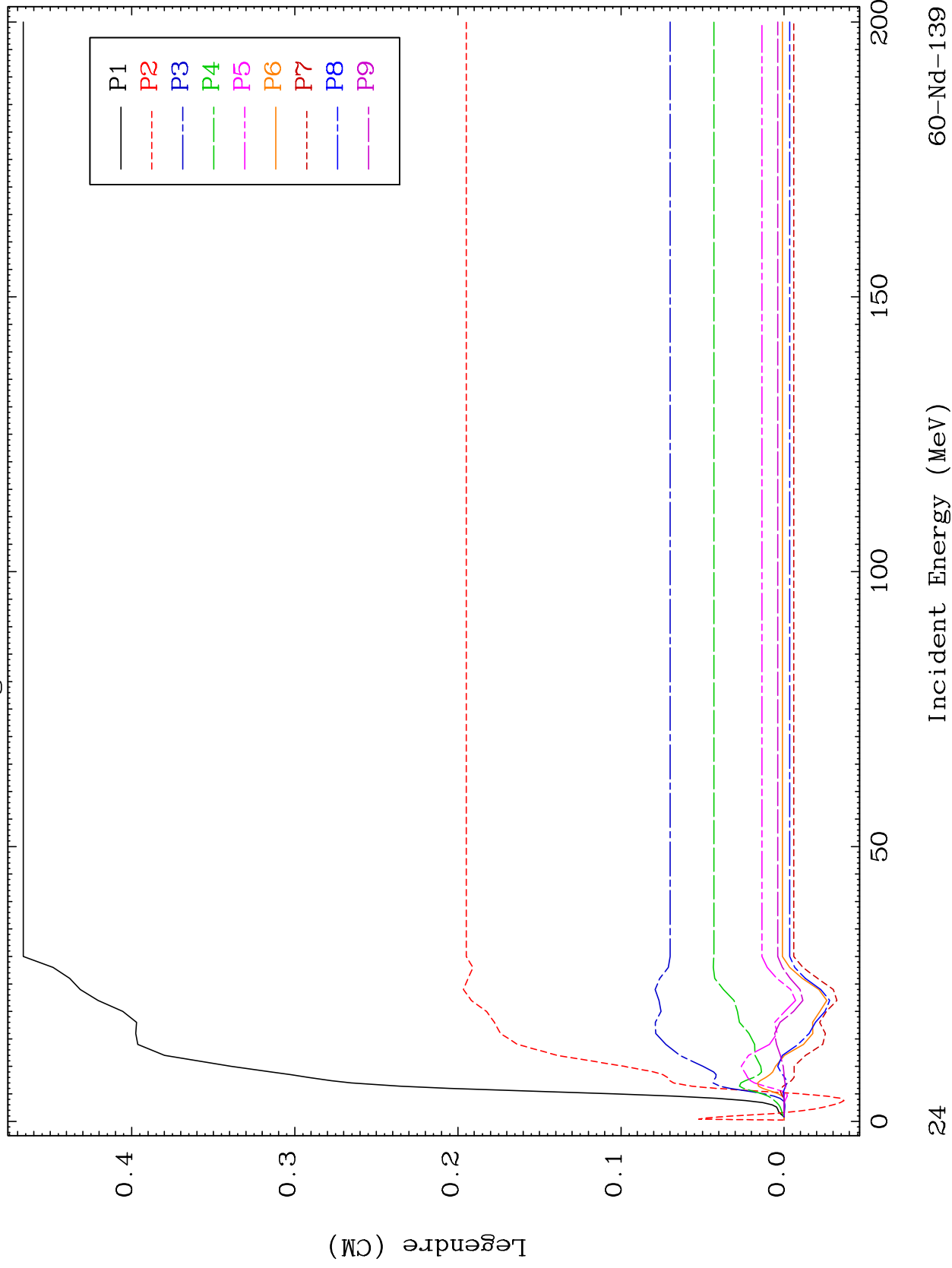




MAT 6016

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

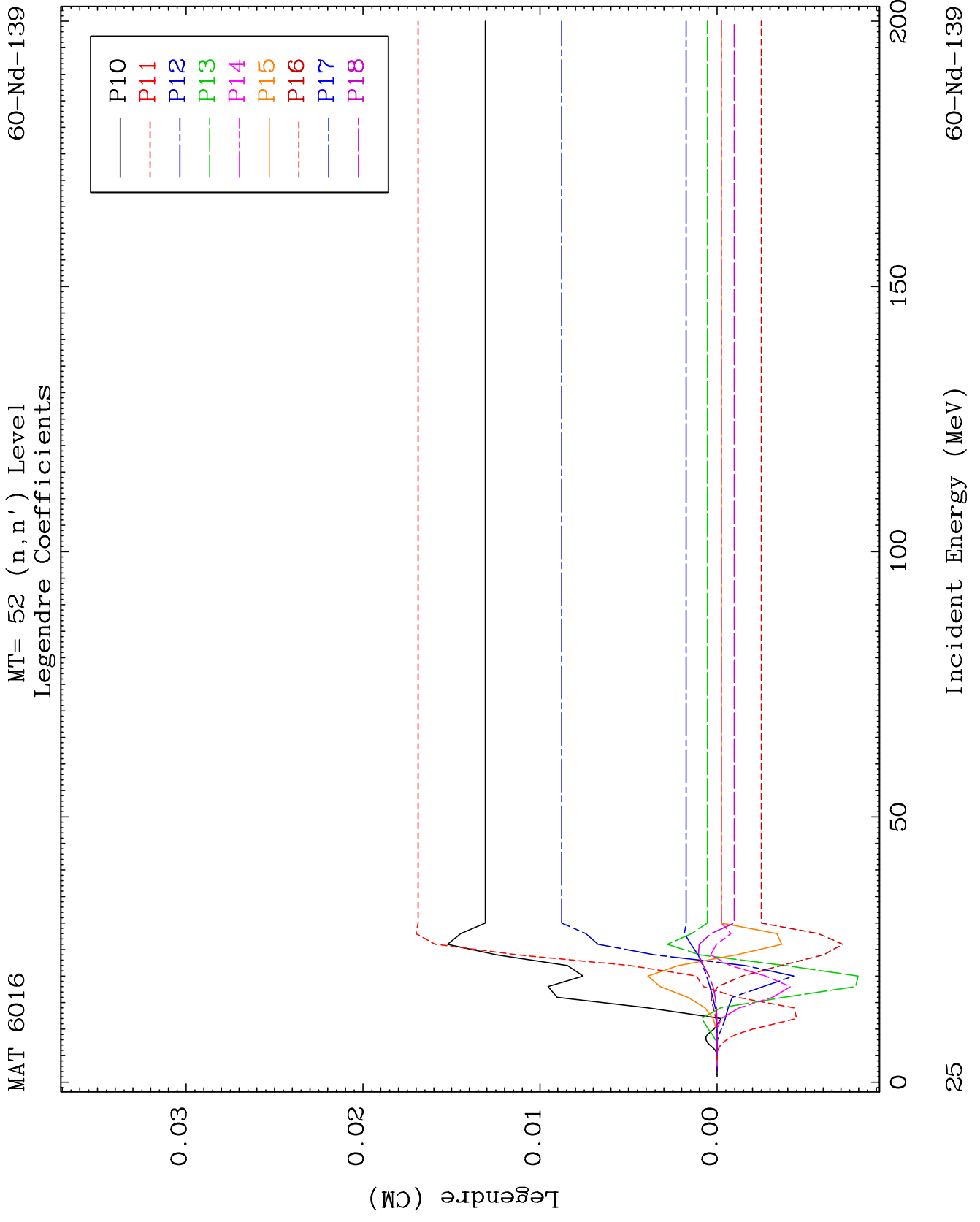
60-Nd-139

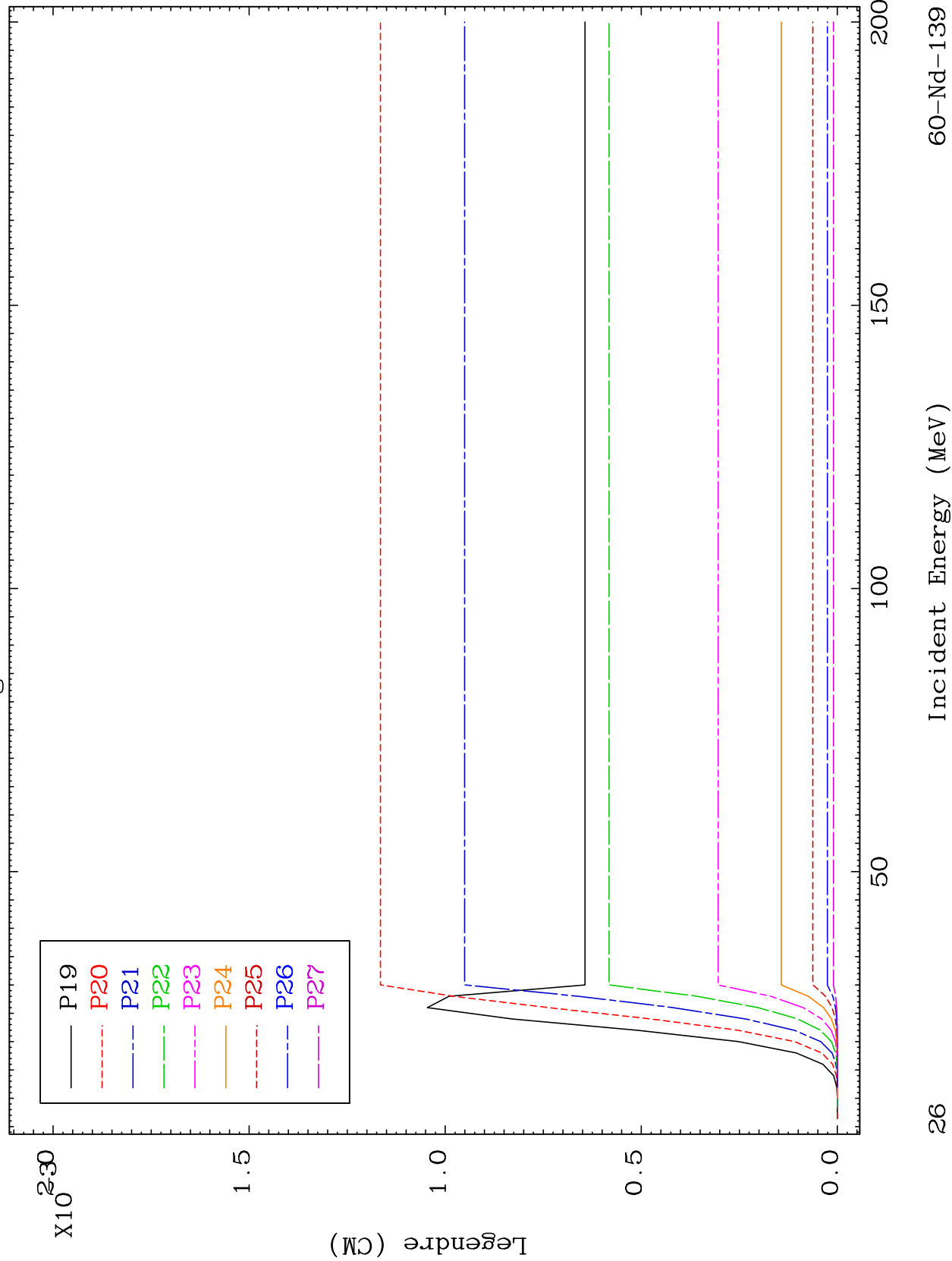


60-Nd-139

Incident Energy (MeV)

24

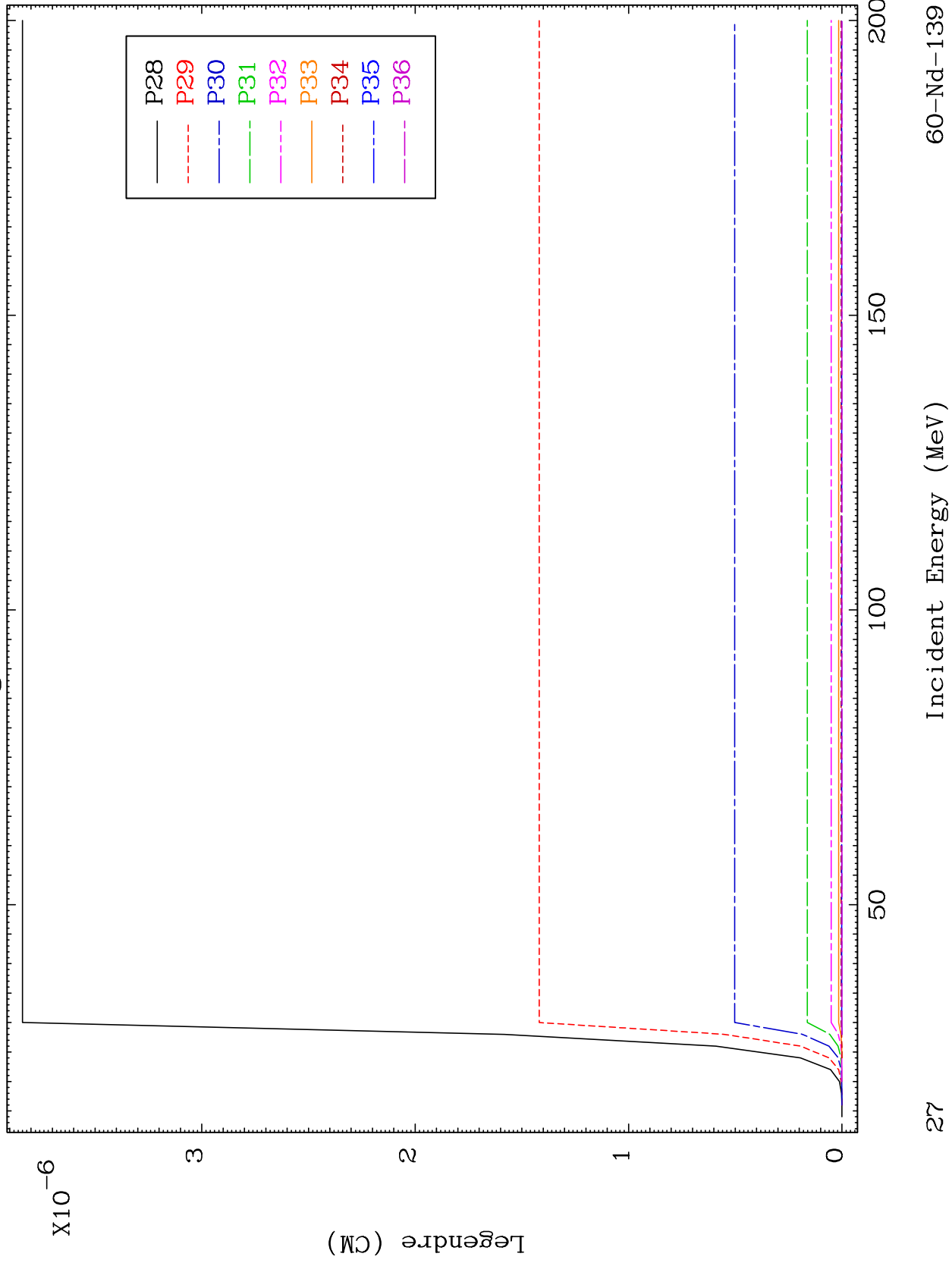




MAT 6016

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

60-Nd-139



27

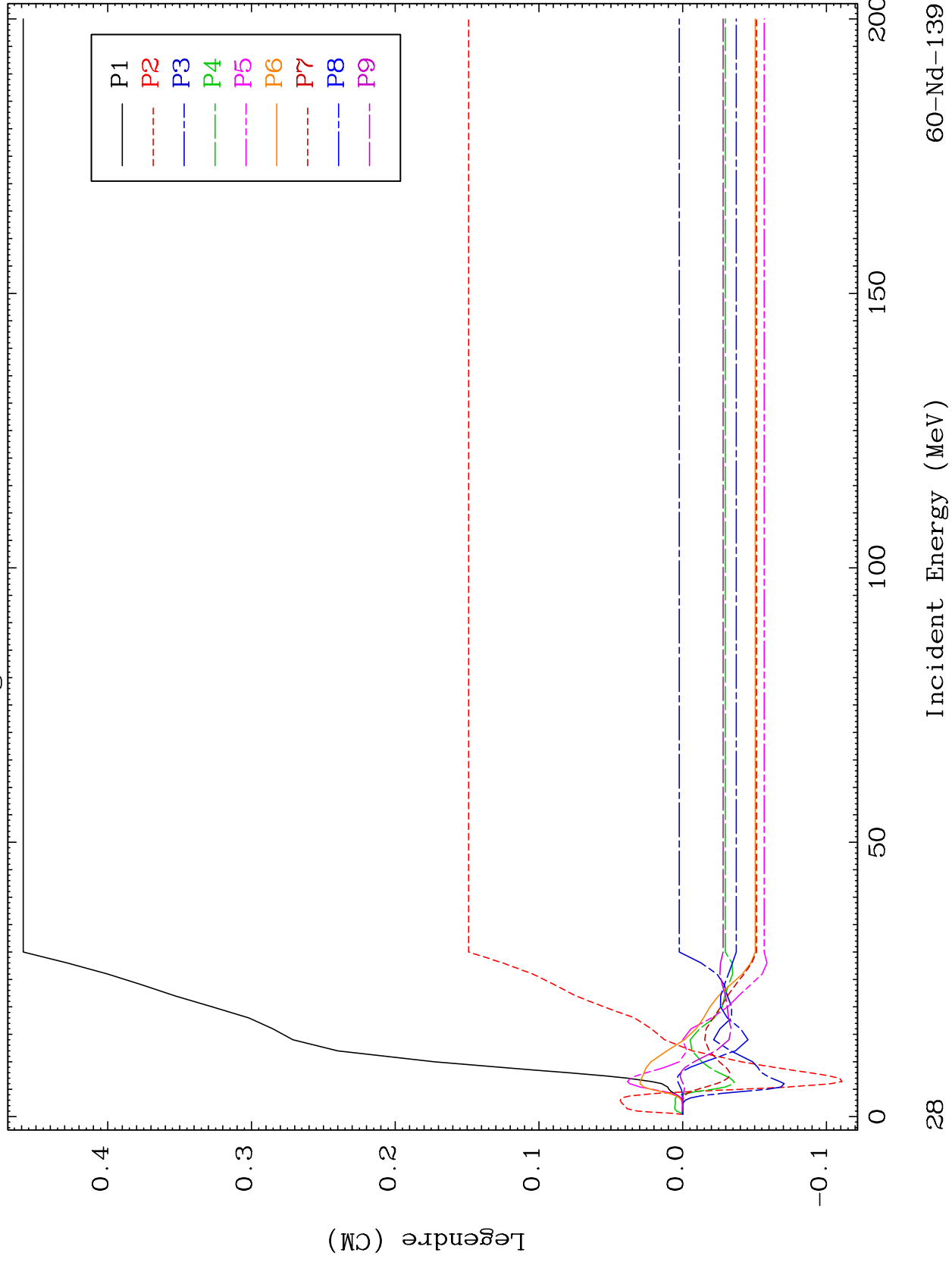
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



60-Nd-139

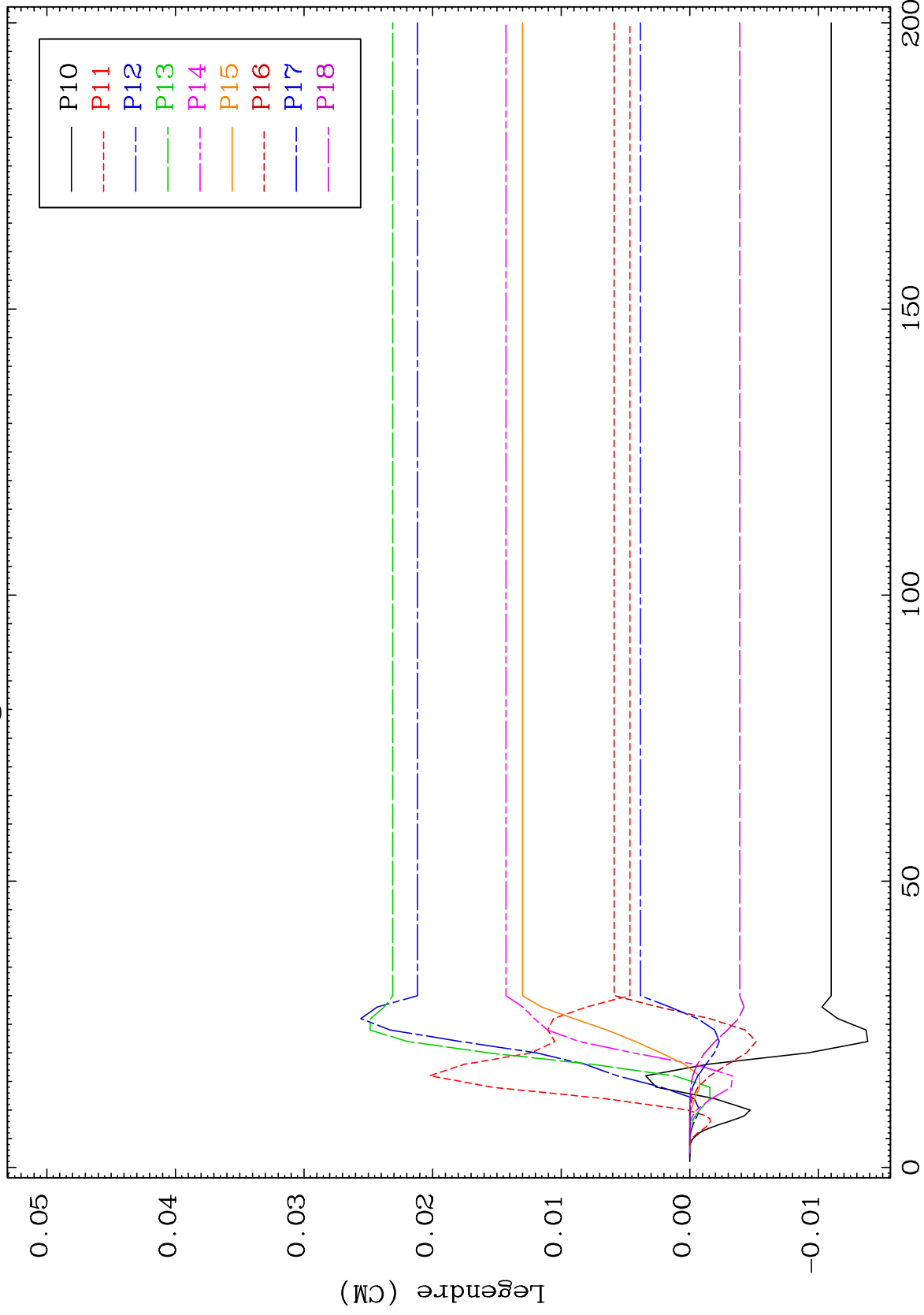
Incident Energy (MeV)

28

MAT 6016

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

60-Nd-139



29

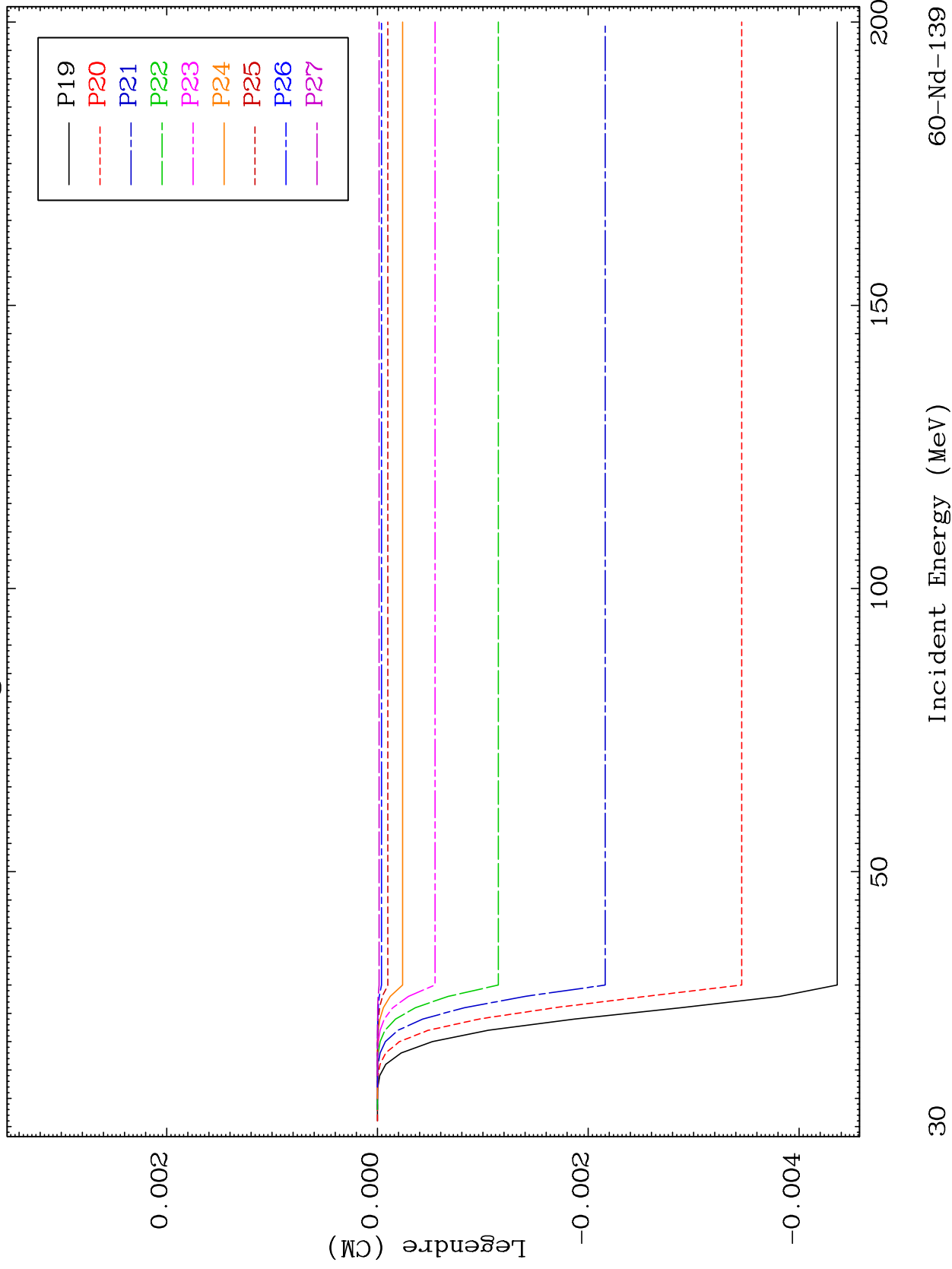
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

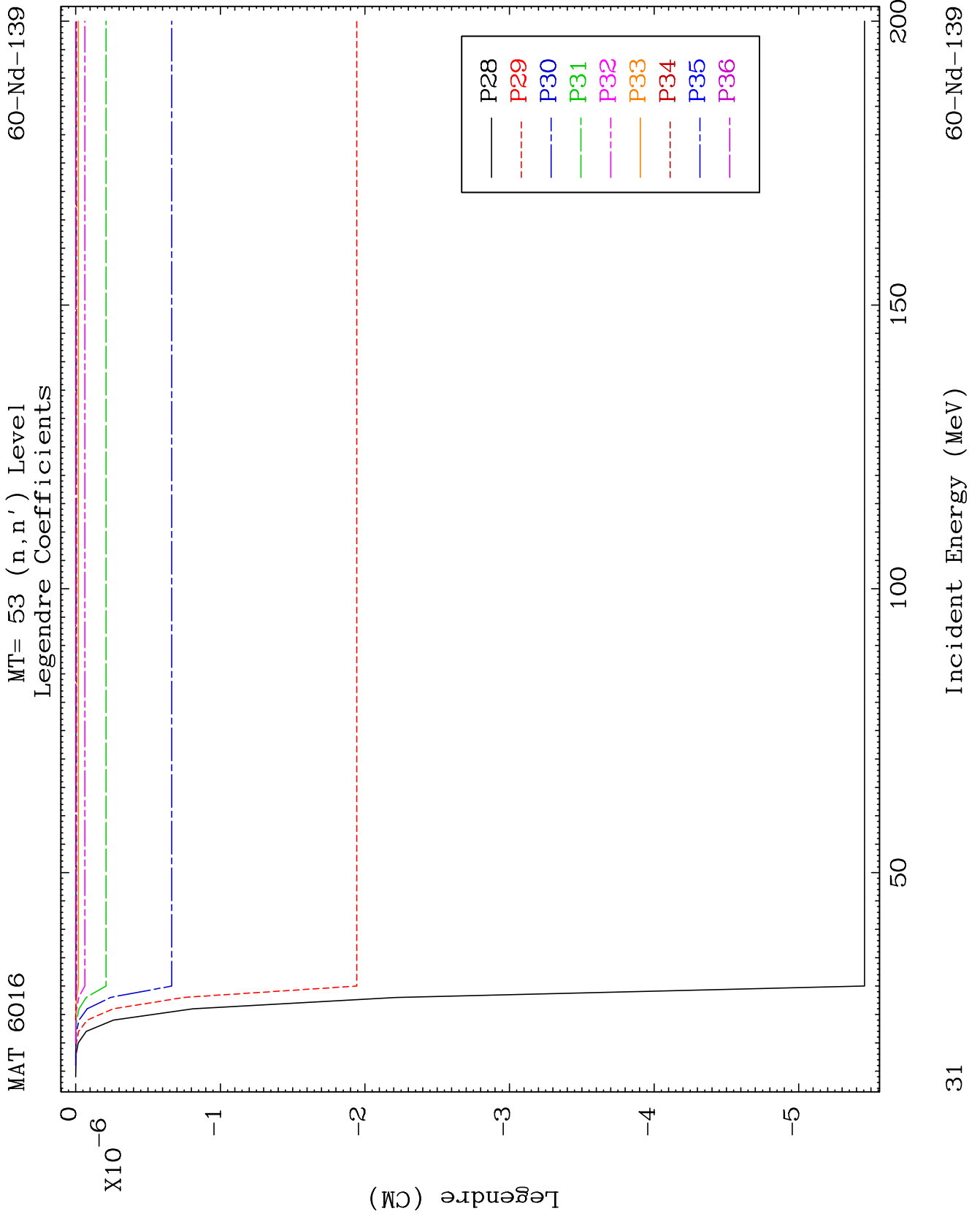
60-Nd-139

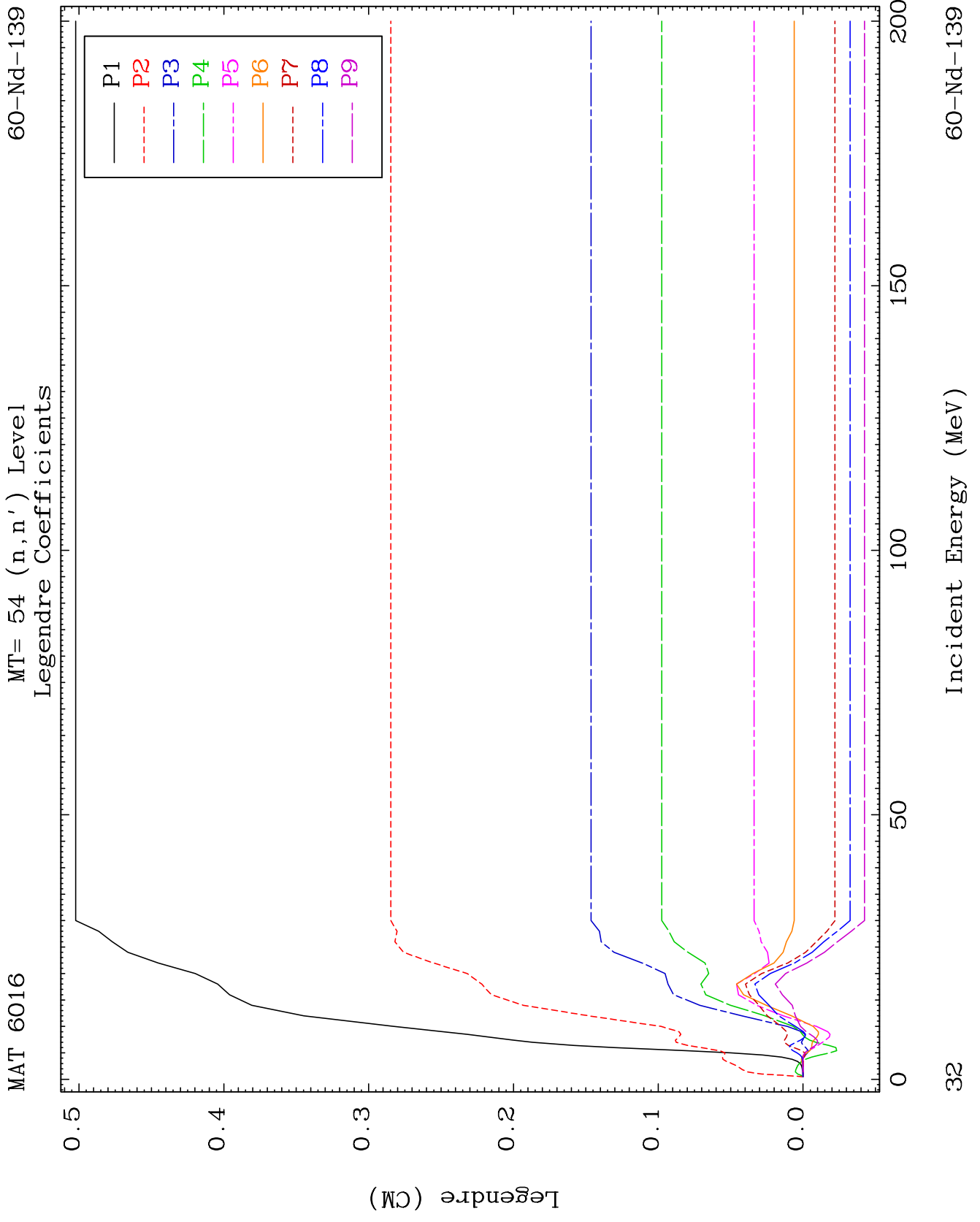


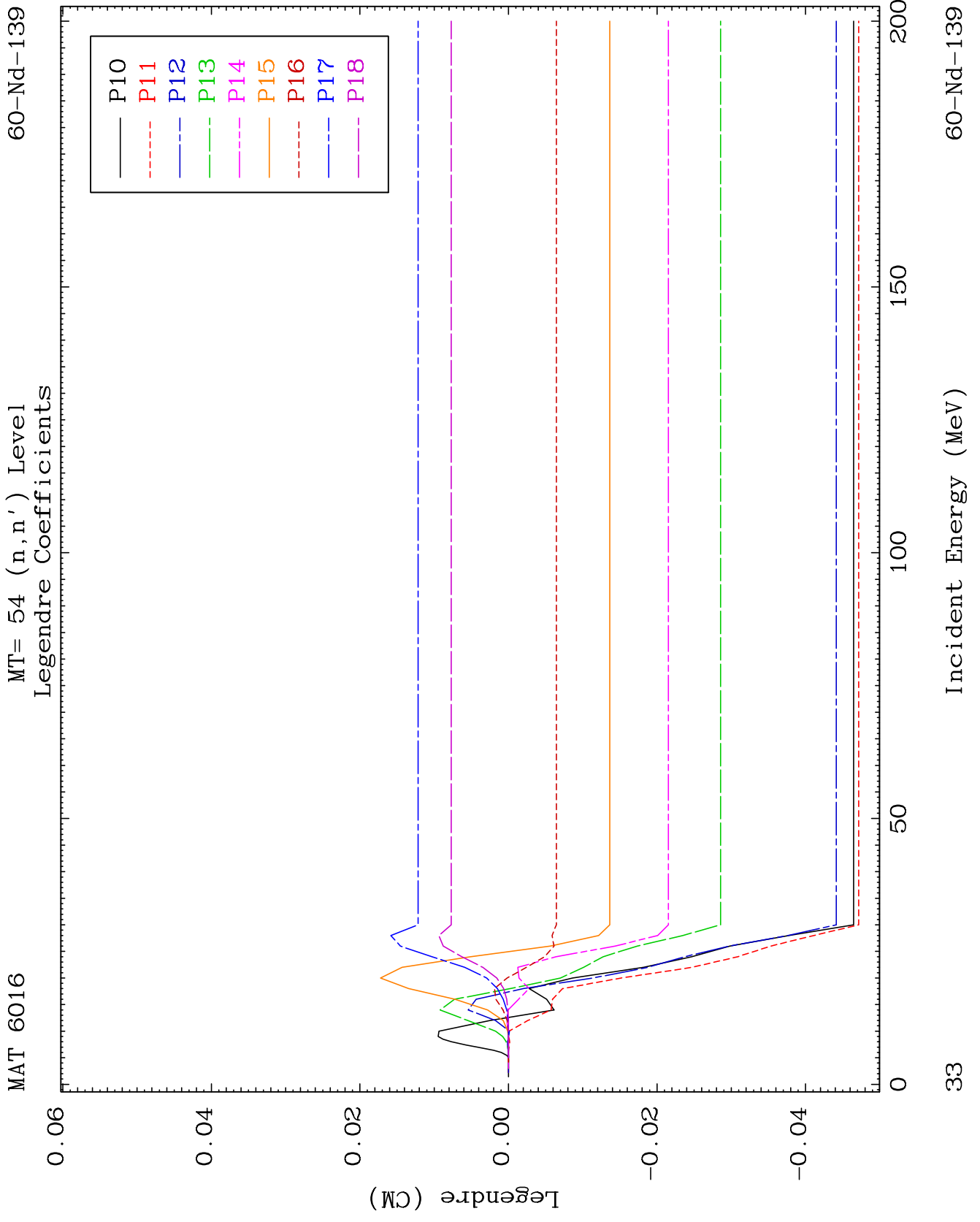
30

Incident Energy (MeV)

60-Nd-139



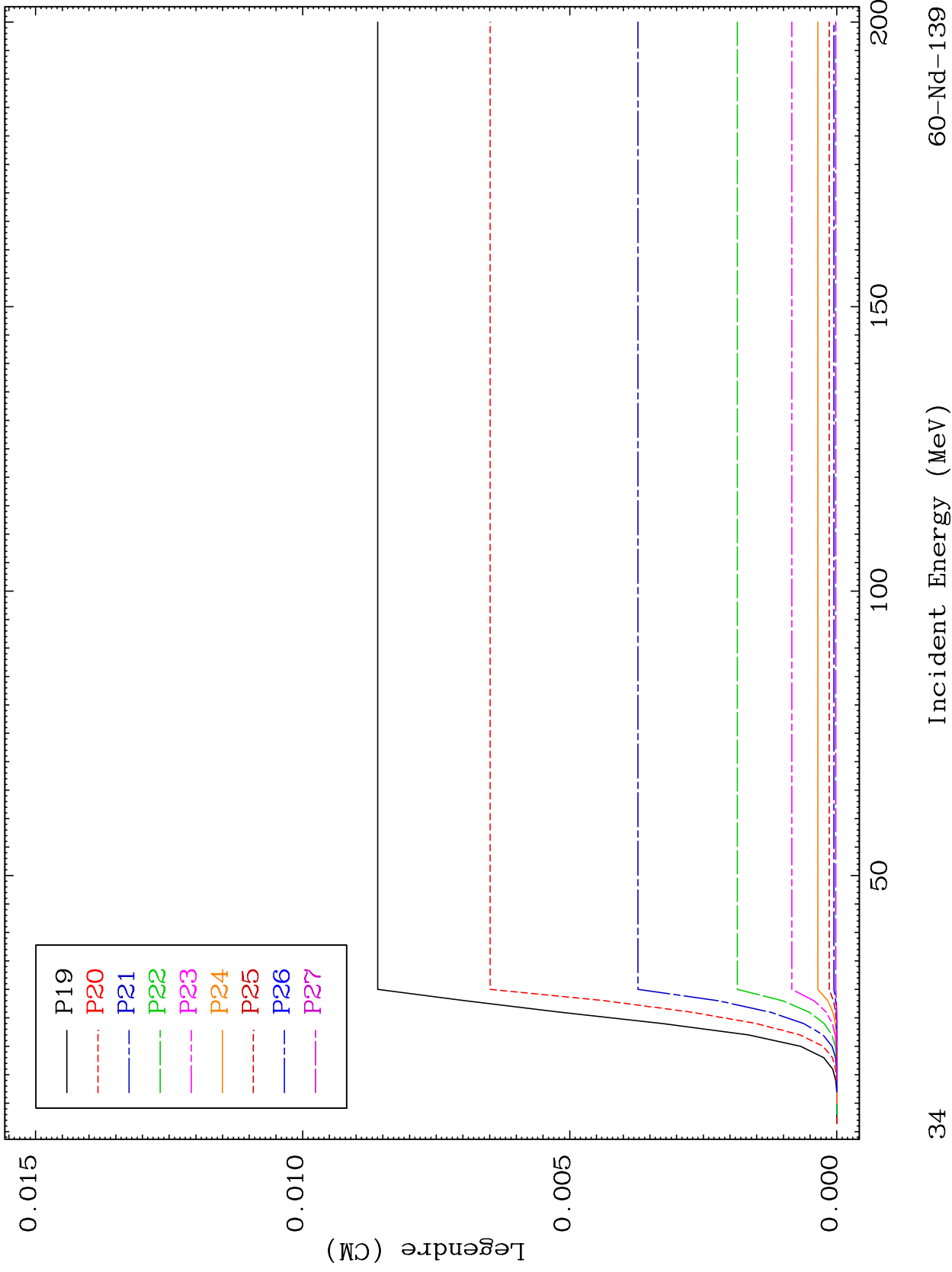




MAT 6016

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

60-Nd-139



34

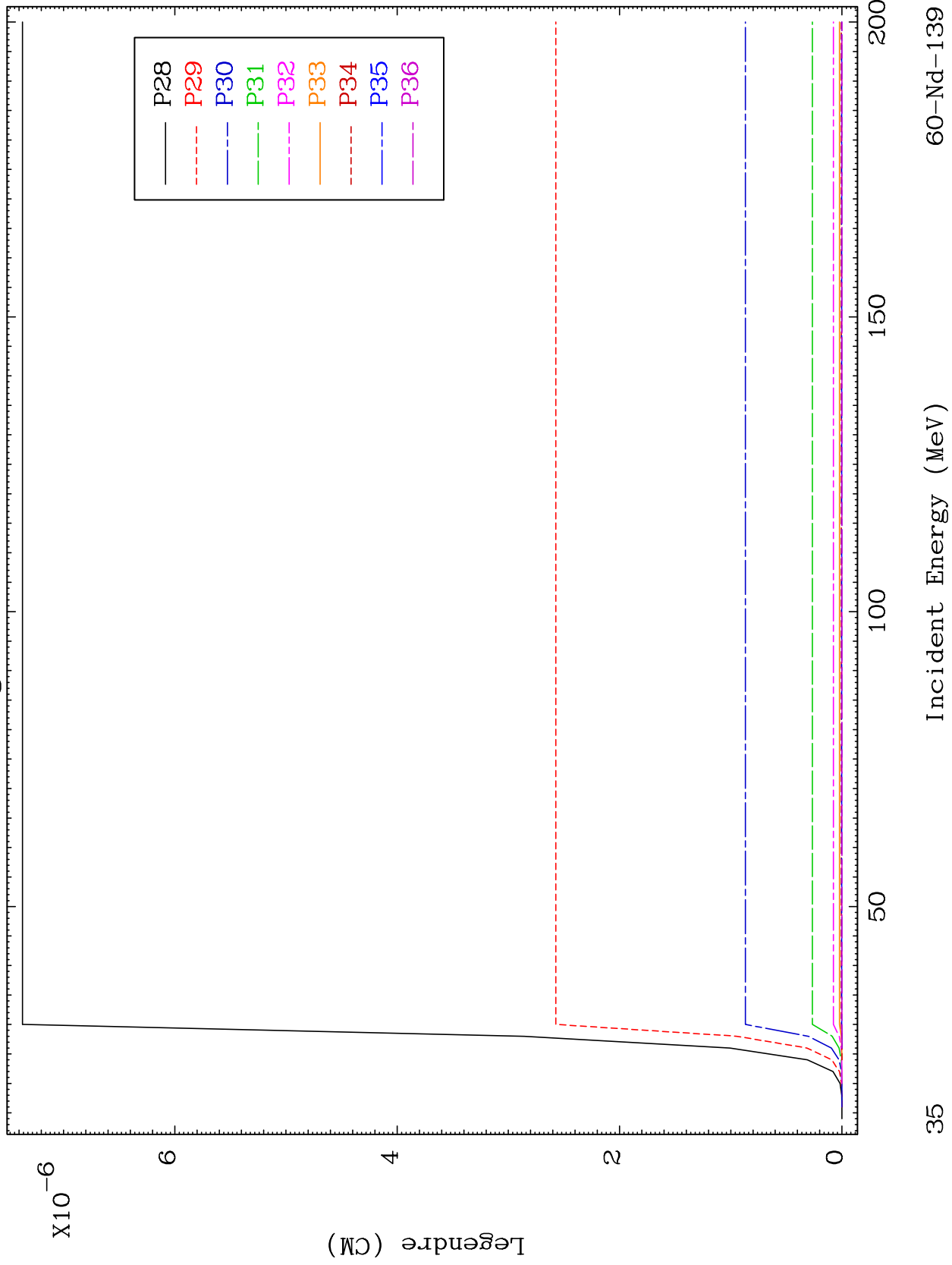
Incident Energy (MeV)

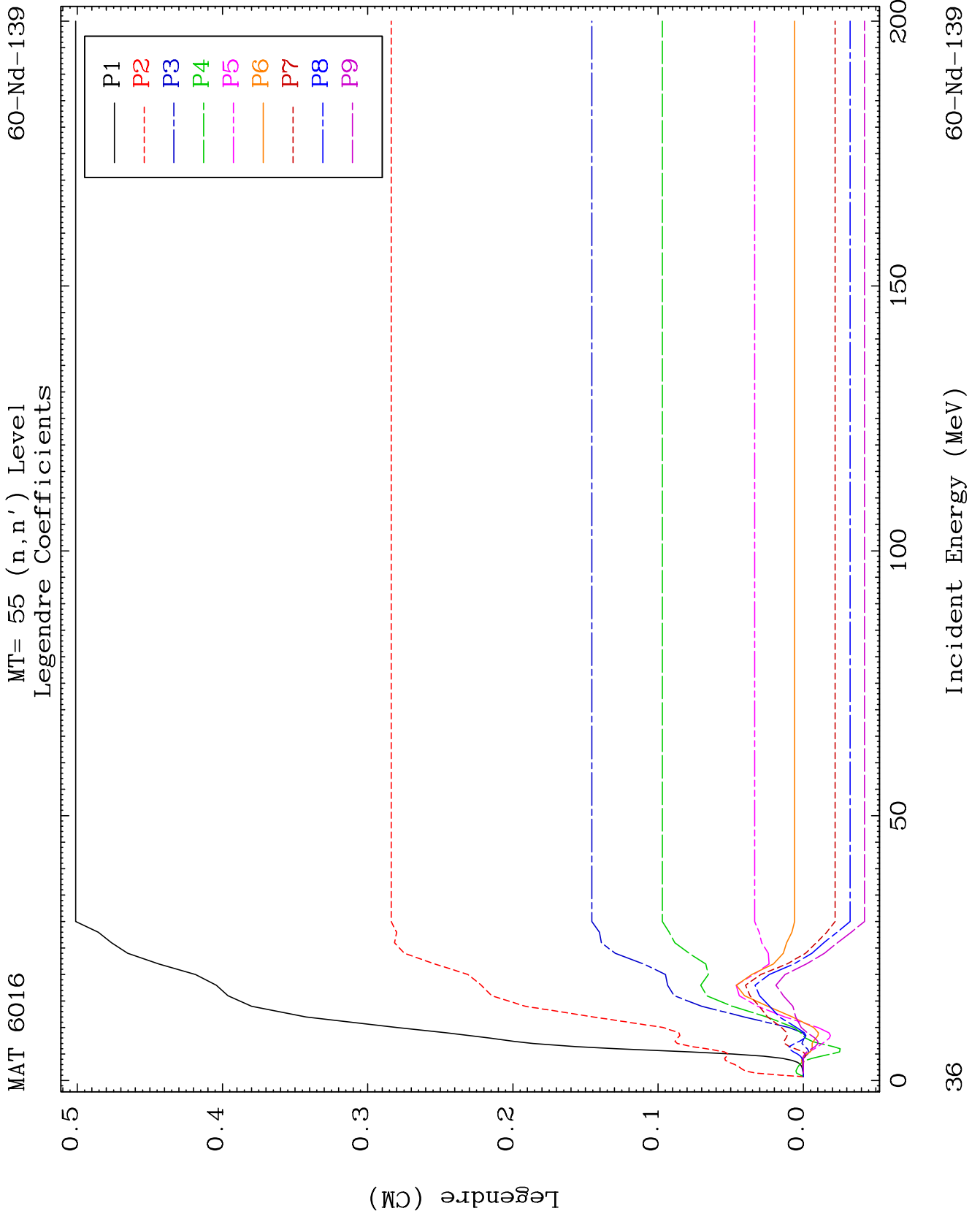
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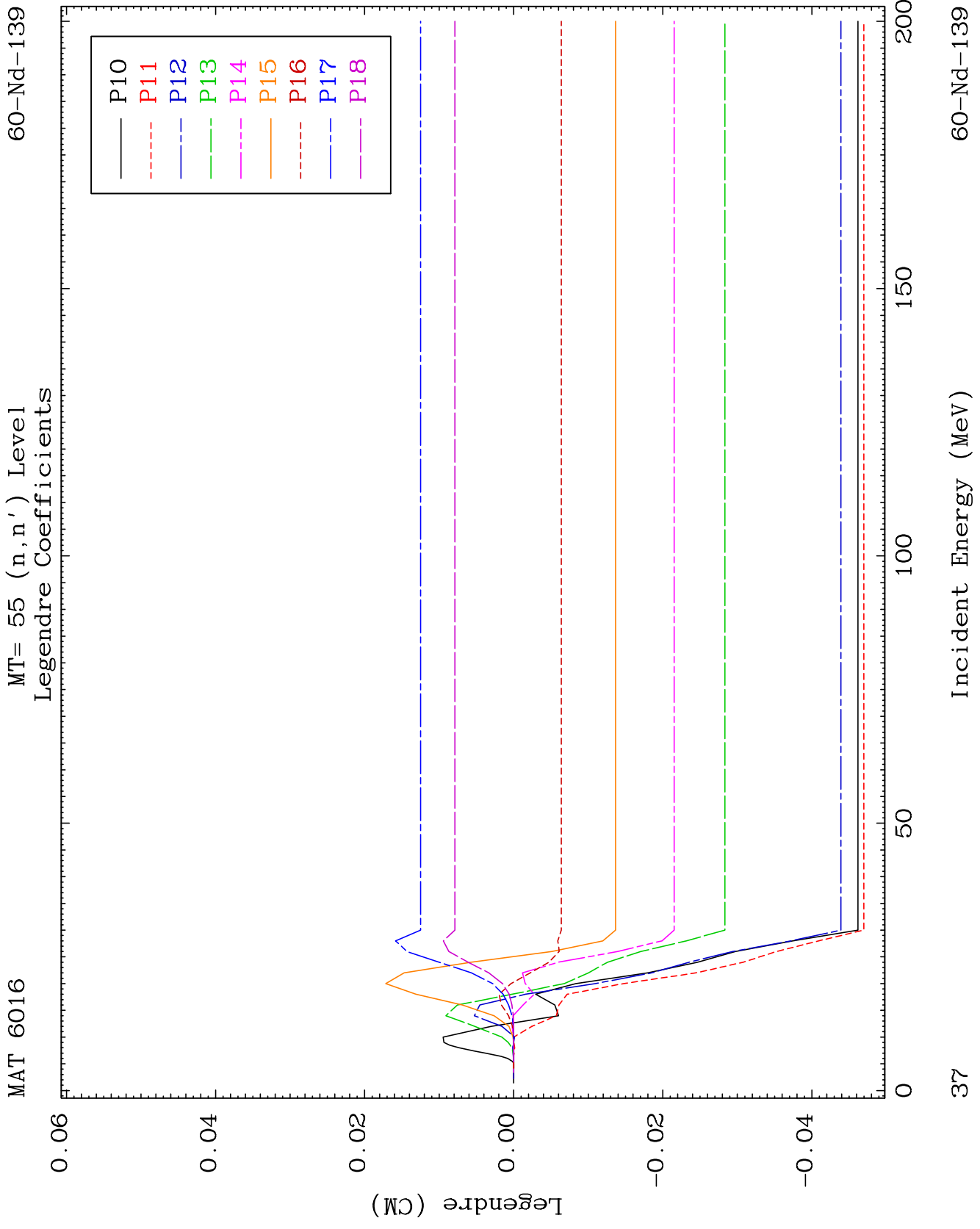
MAT 6016

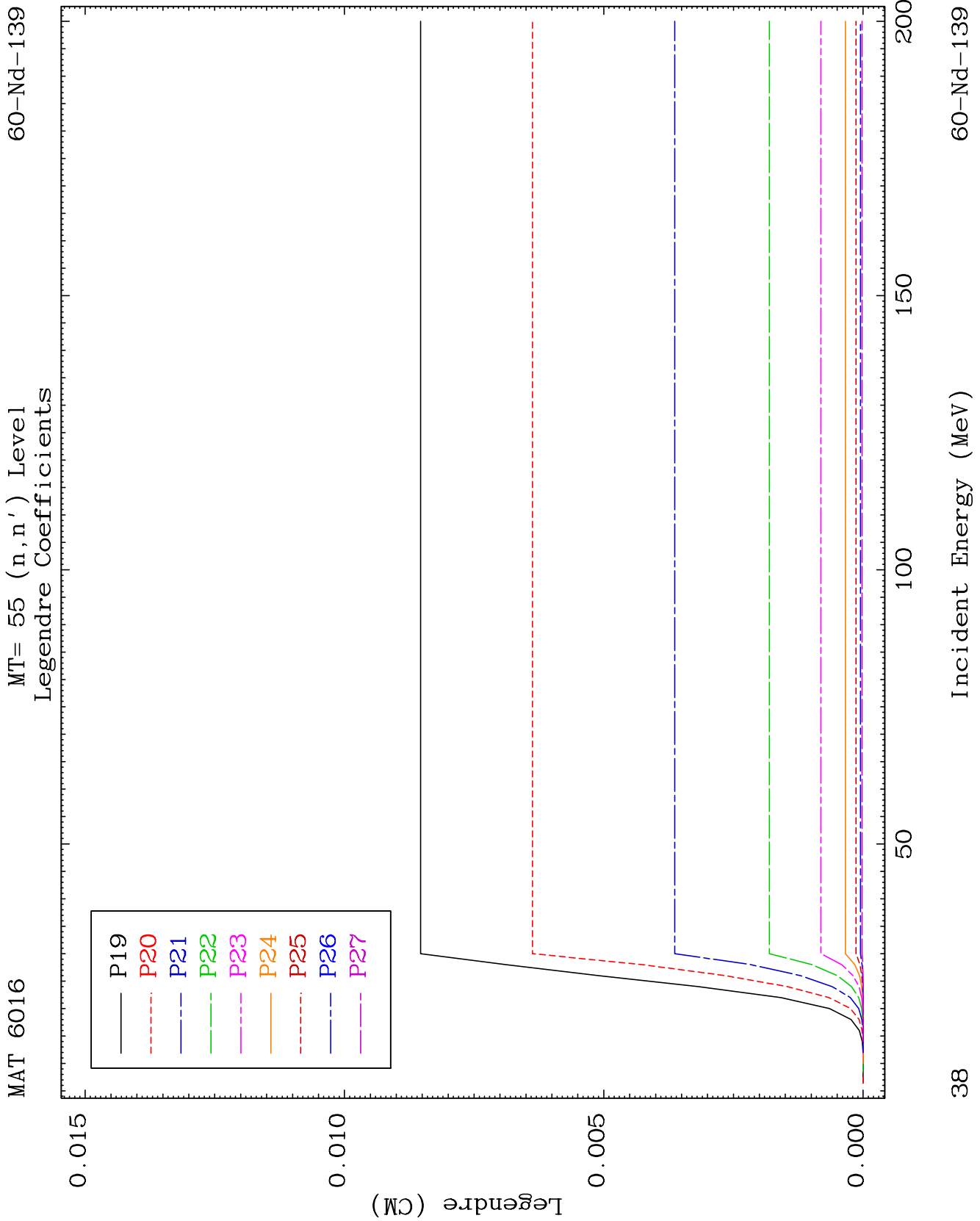
MT= 54 (n,n') Level
Legendre Coefficients

60-Nd-139





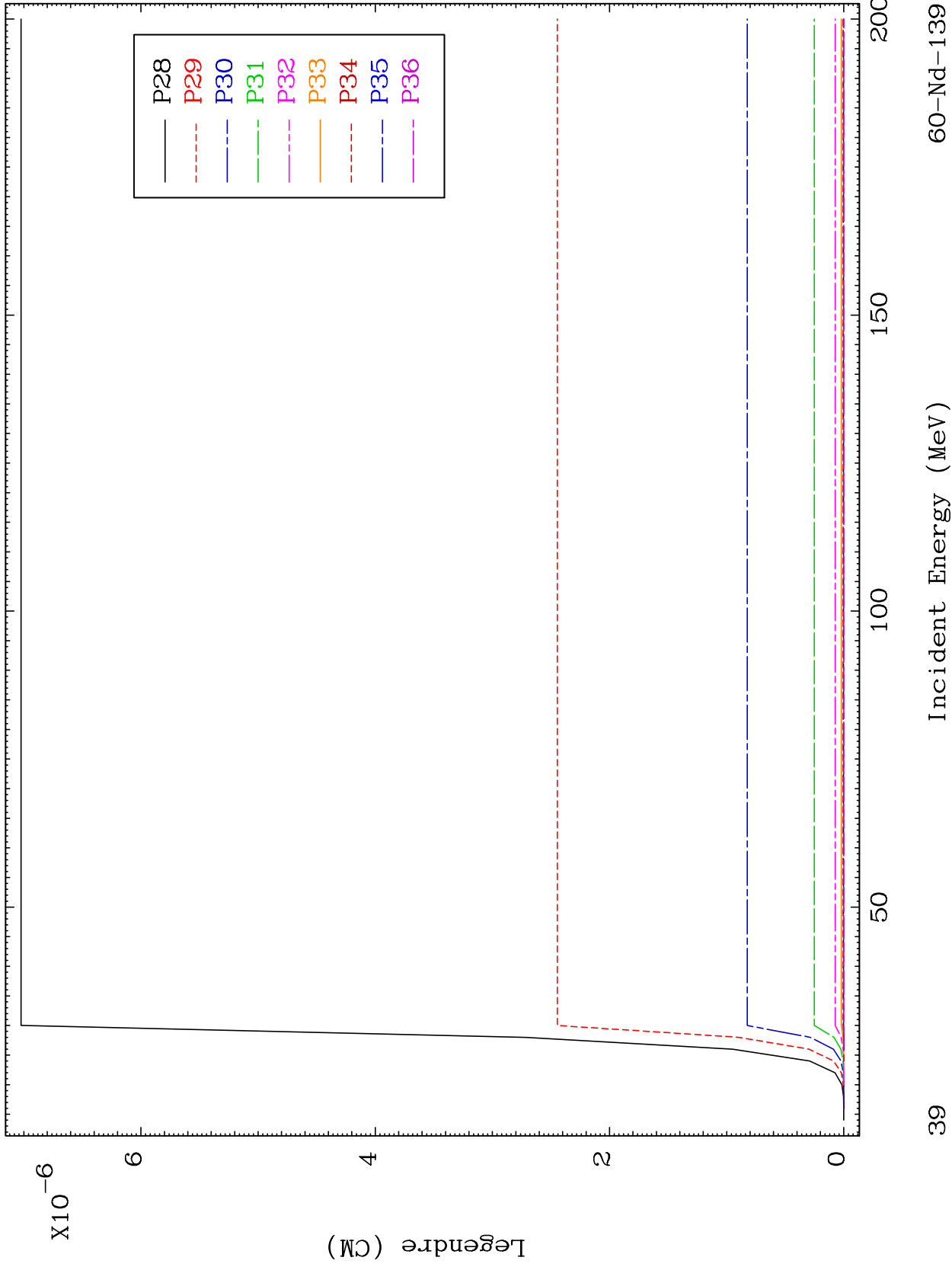




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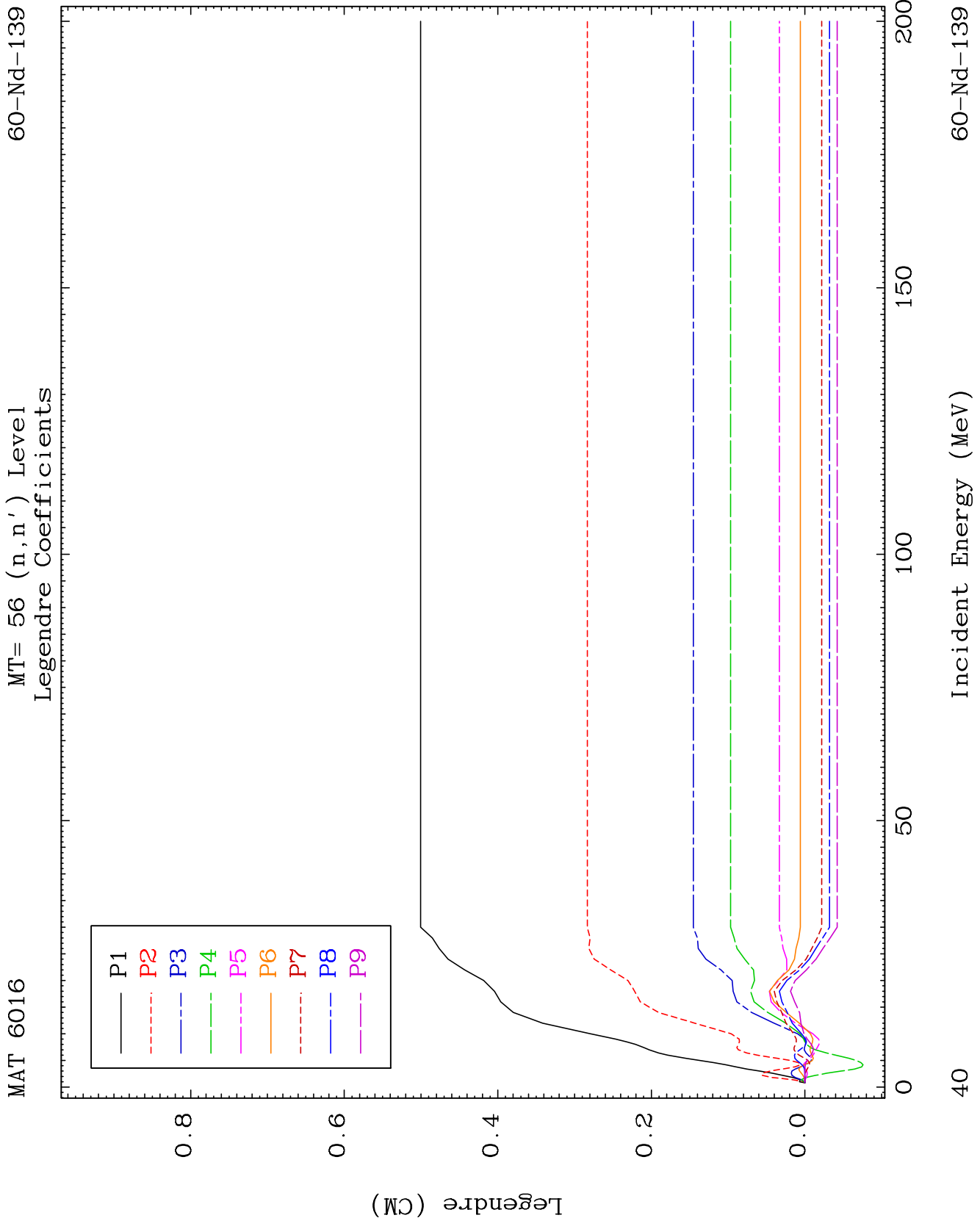
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Legendre Coefficients

60-Nd-139



39

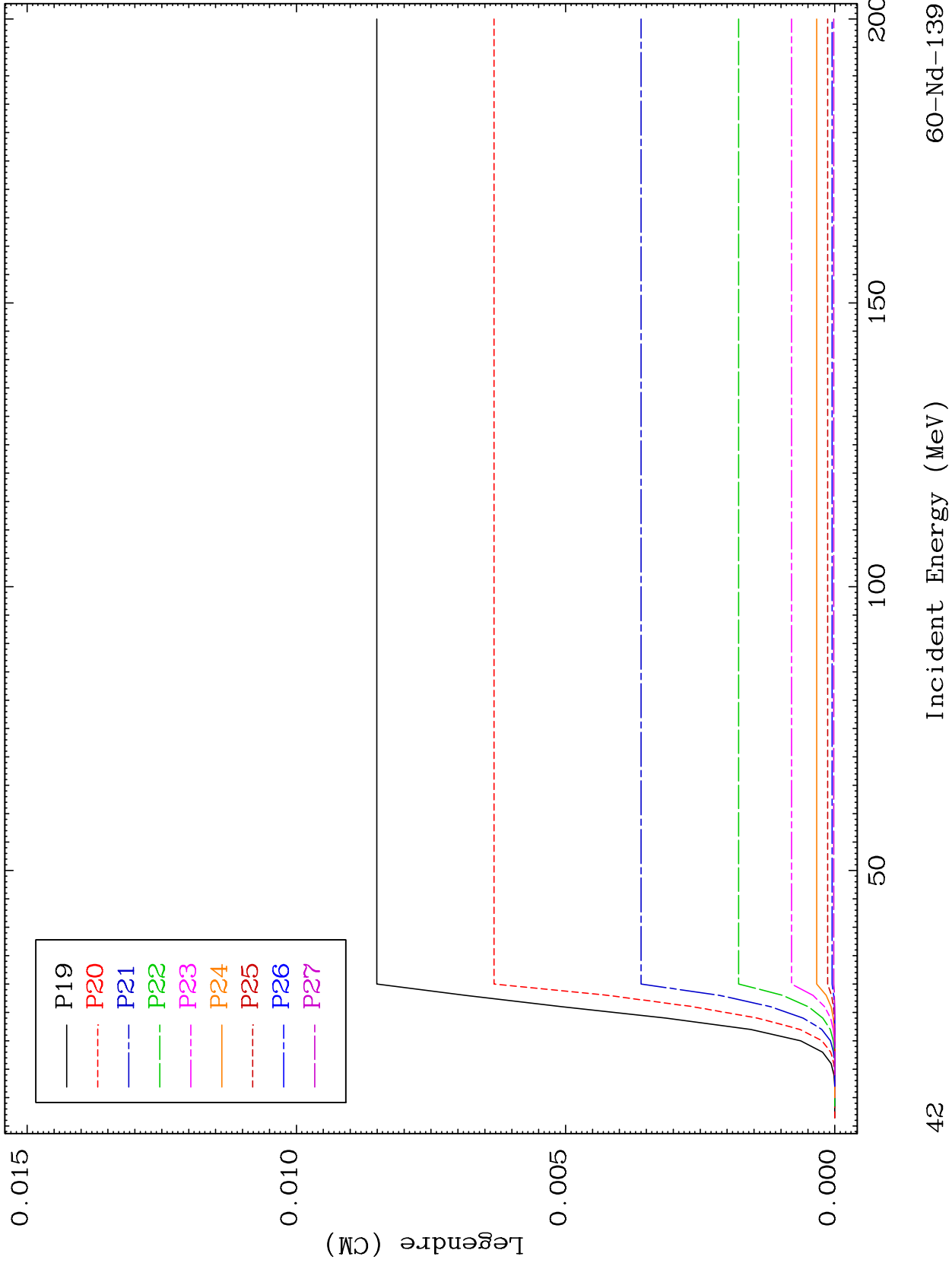
60-Nd-139



MAT 6016

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

60-Nd-139



42

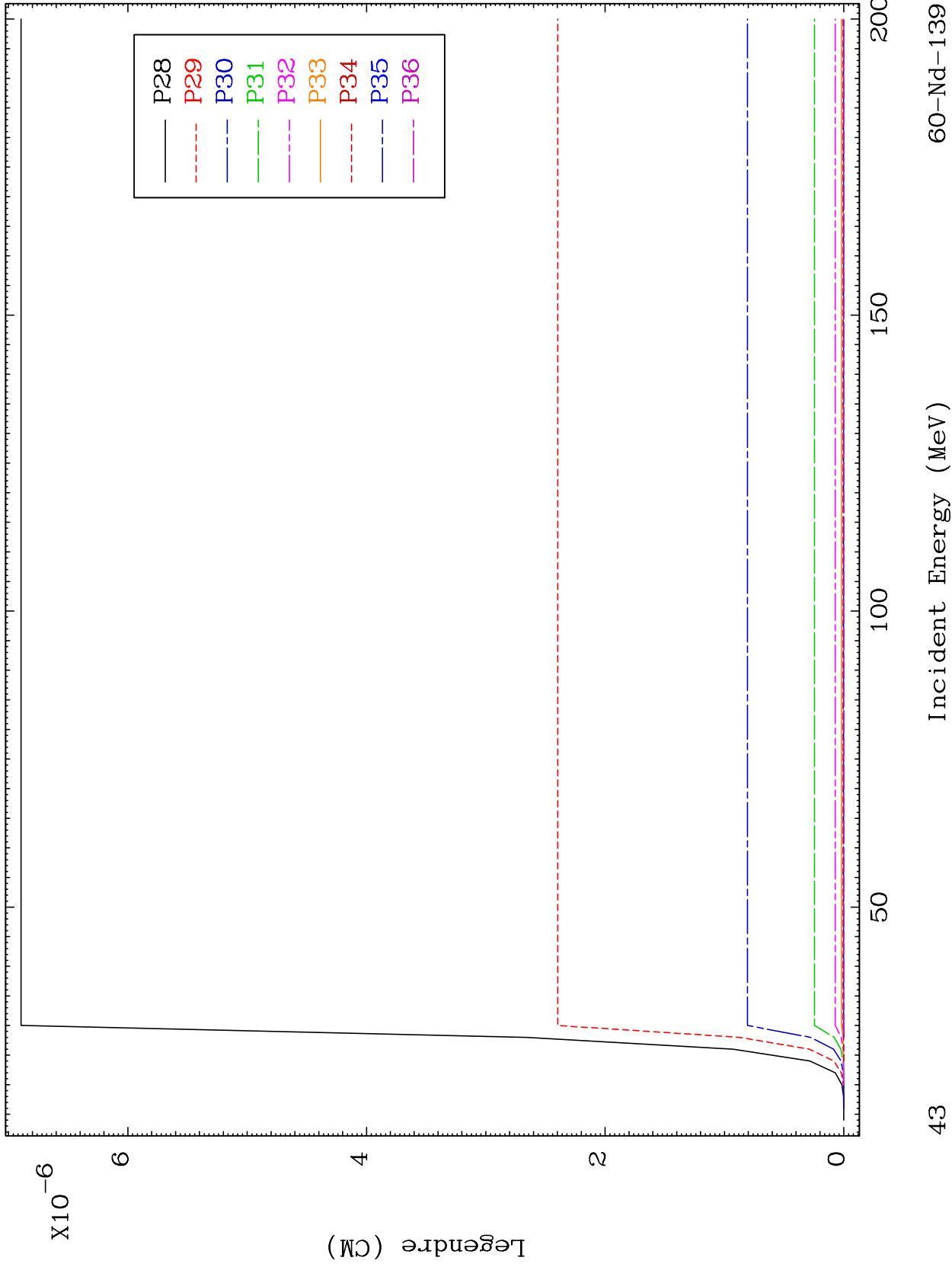
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

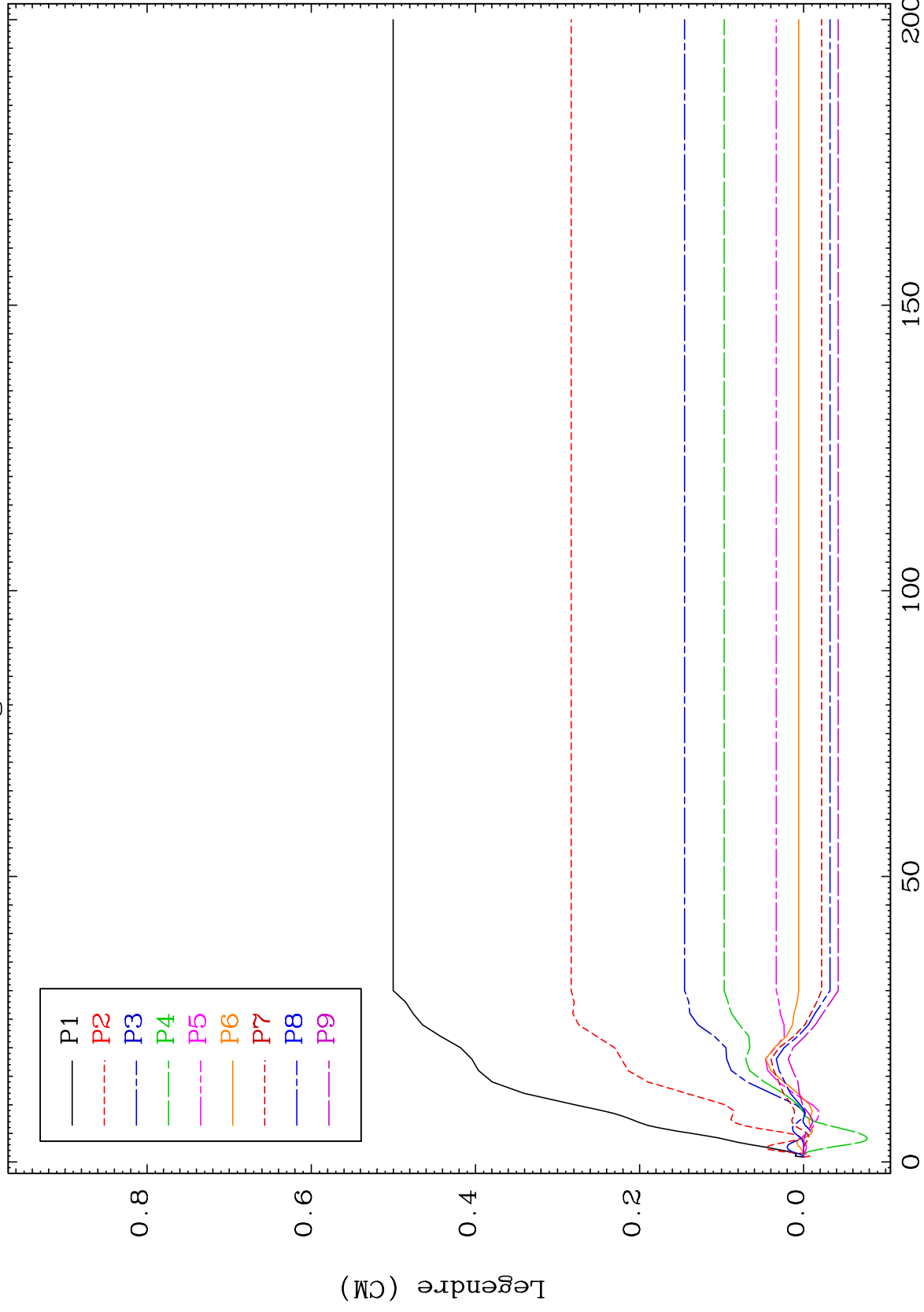
60-Nd-139



MAT 6016

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

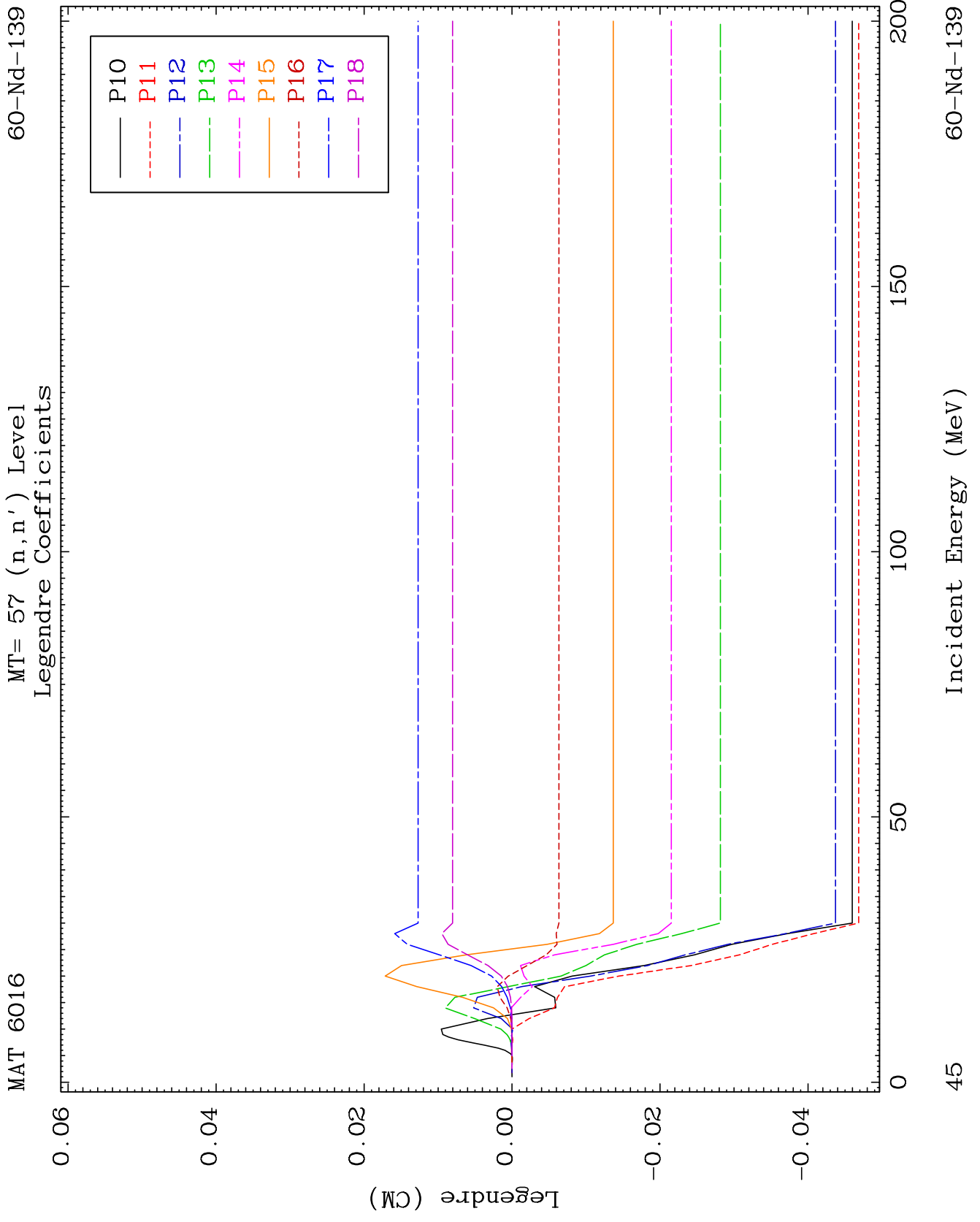
60-Nd-139



44

Incident Energy (MeV)

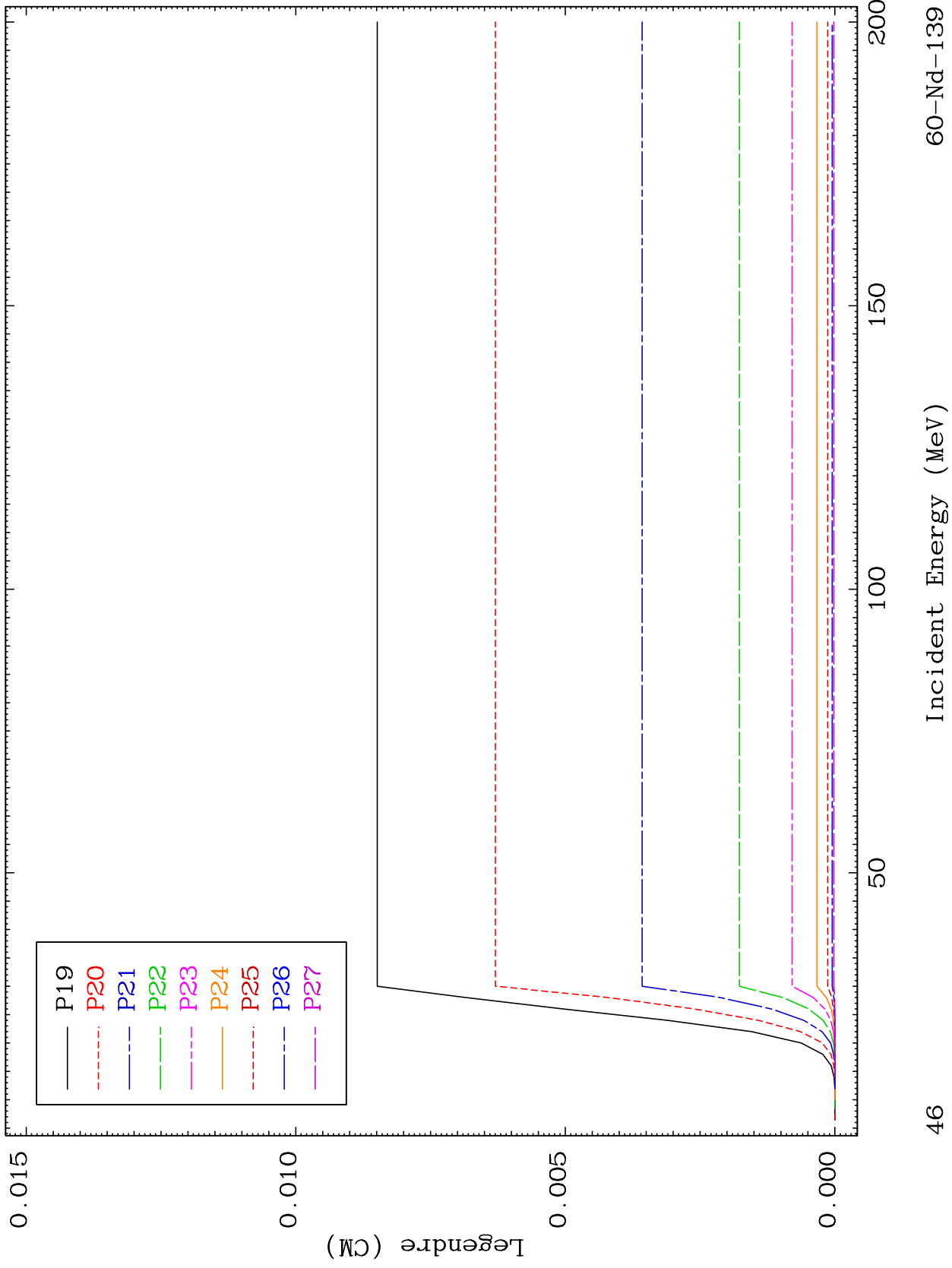
60-Nd-139



MAT 6016

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

60-Nd-139



46

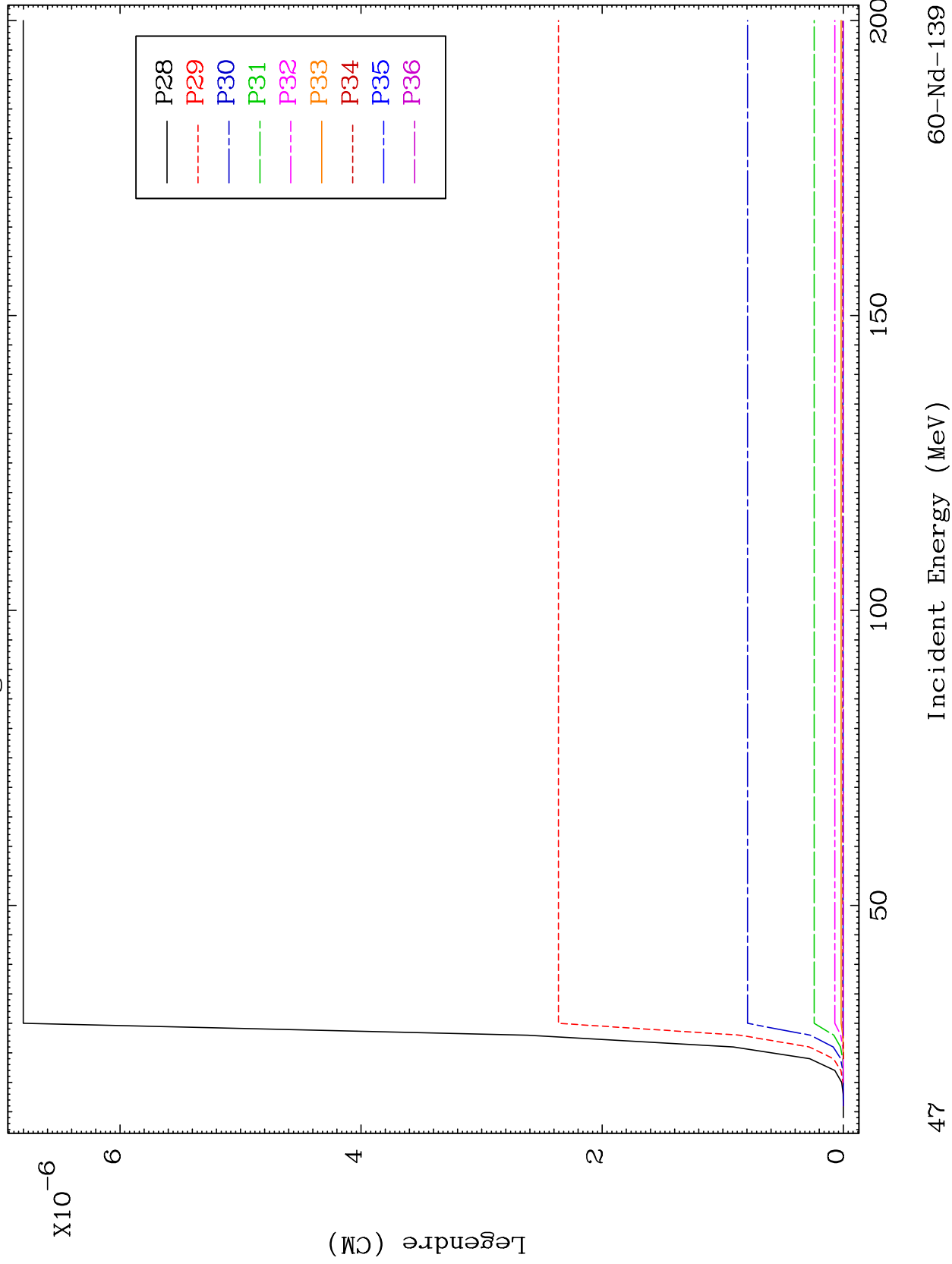
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



47

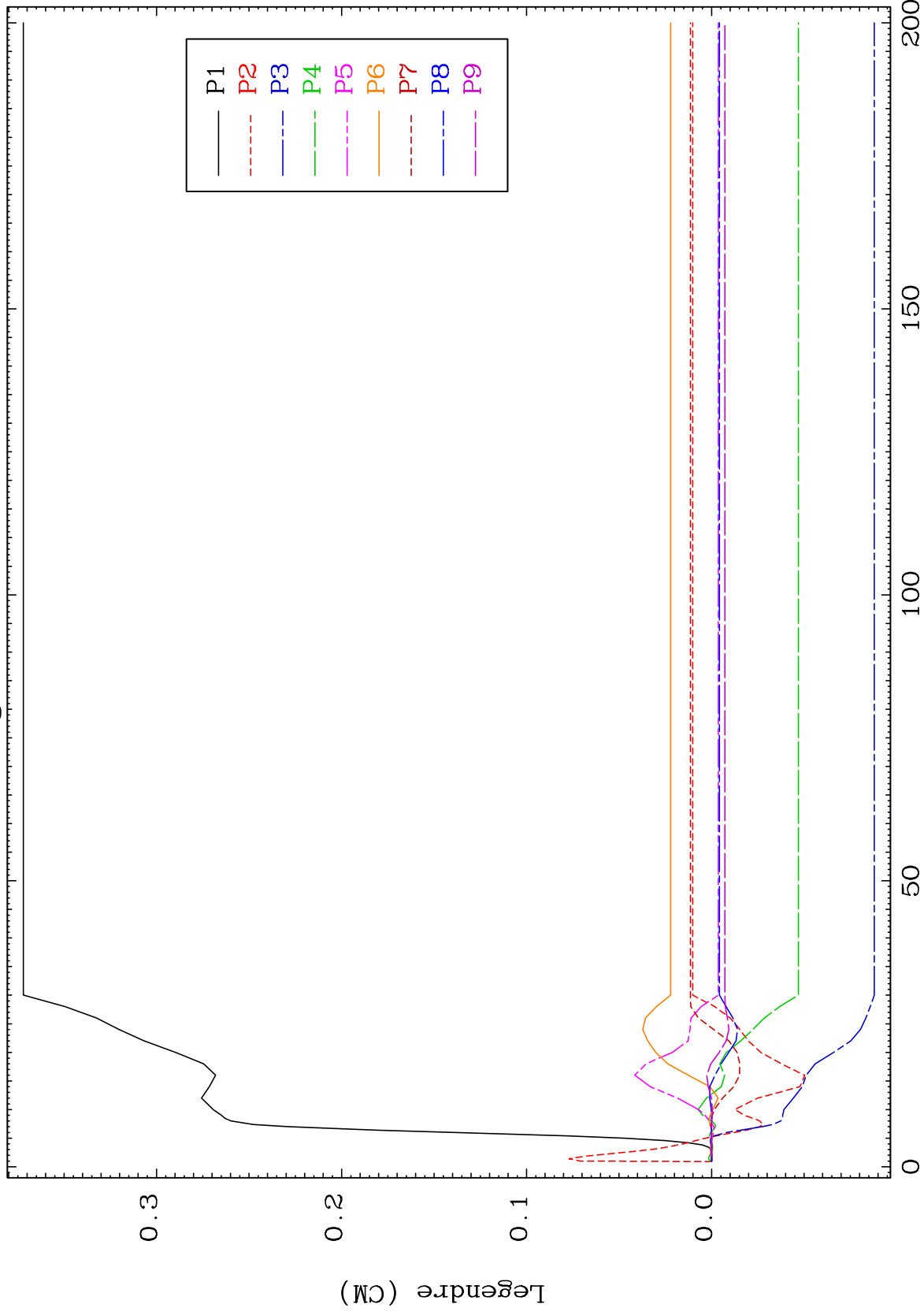
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



60-Nd-139

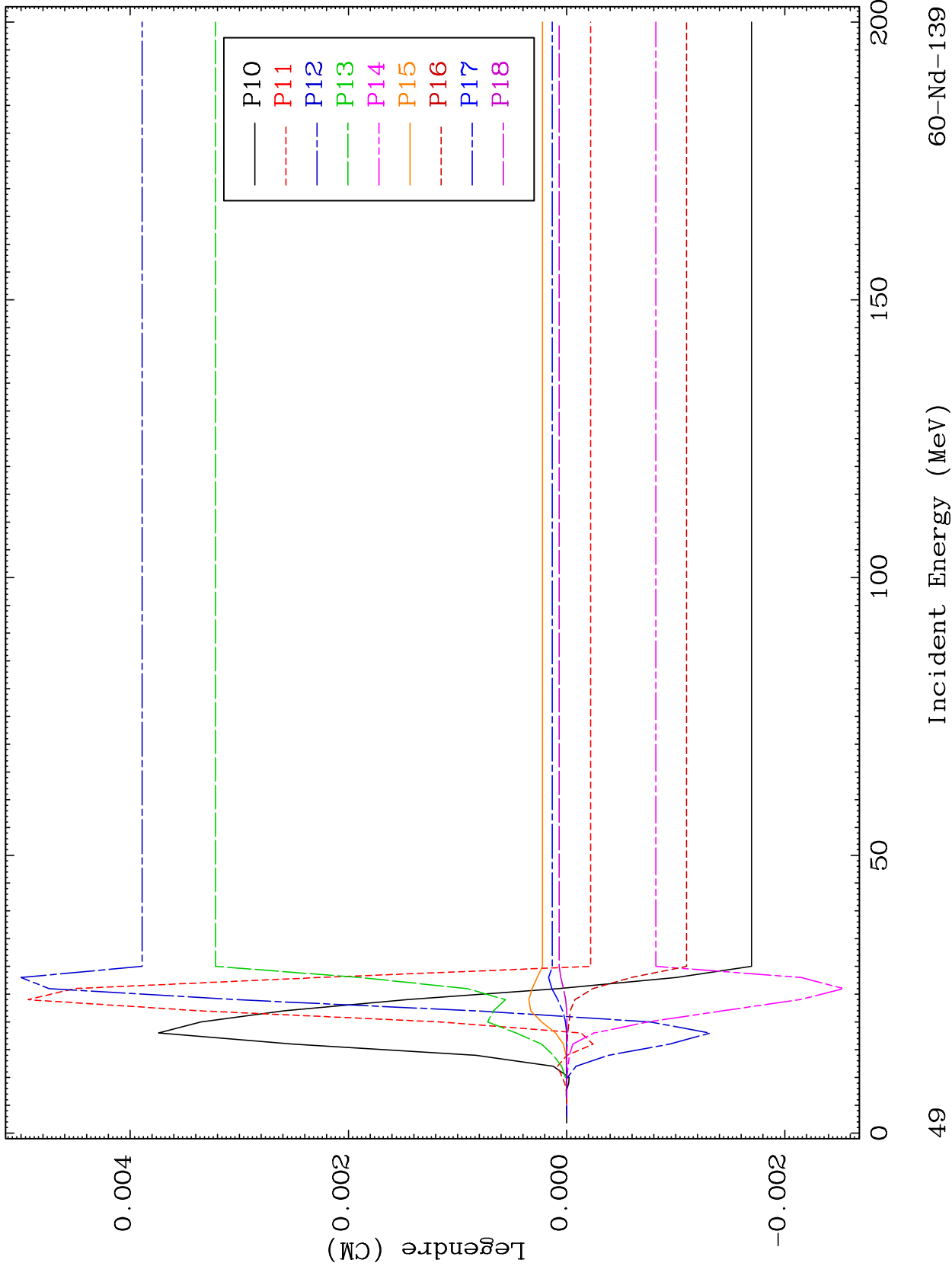
Incident Energy (MeV)

48

MAT 6016

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

60-Nd-139



49

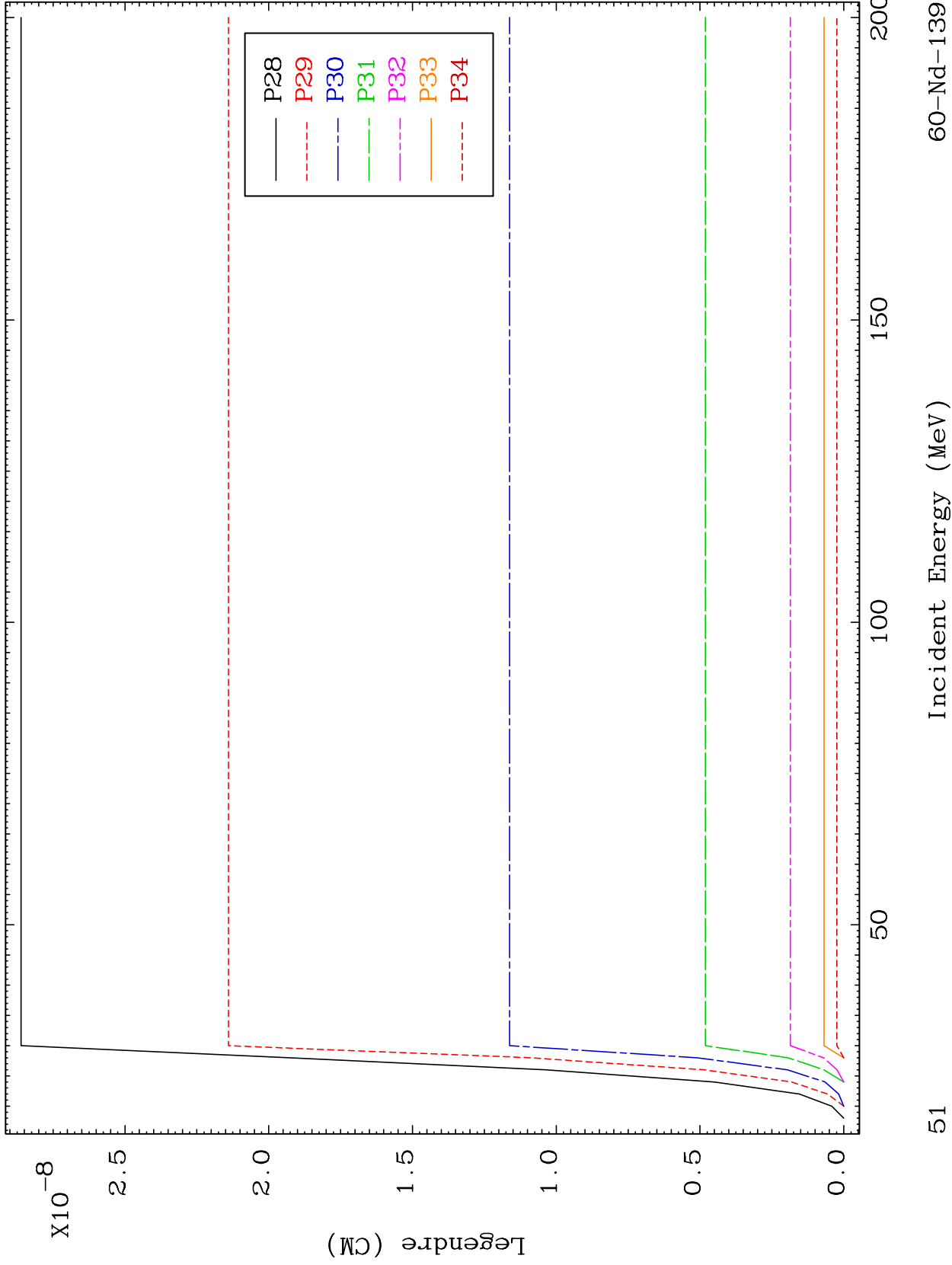
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



51

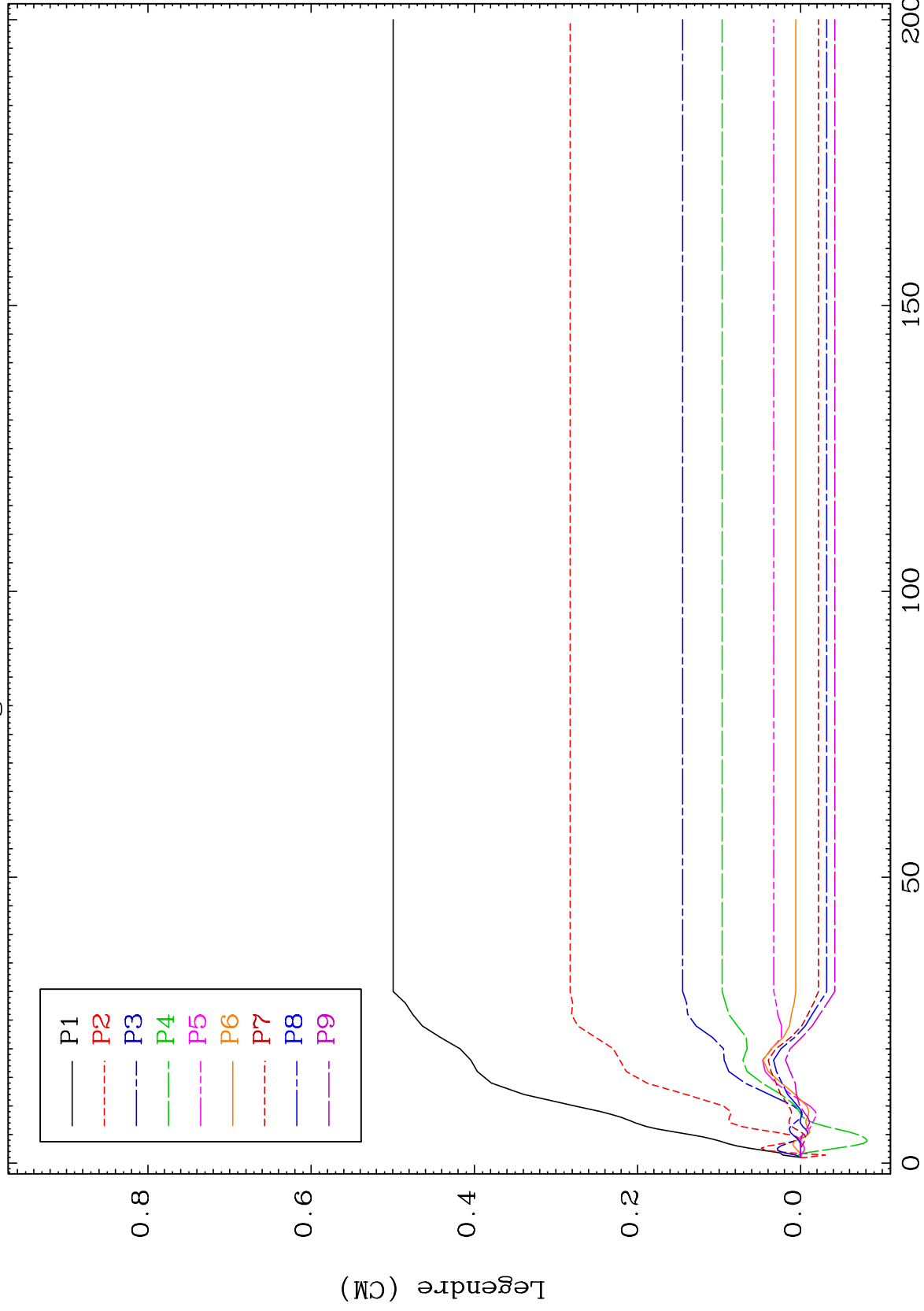
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

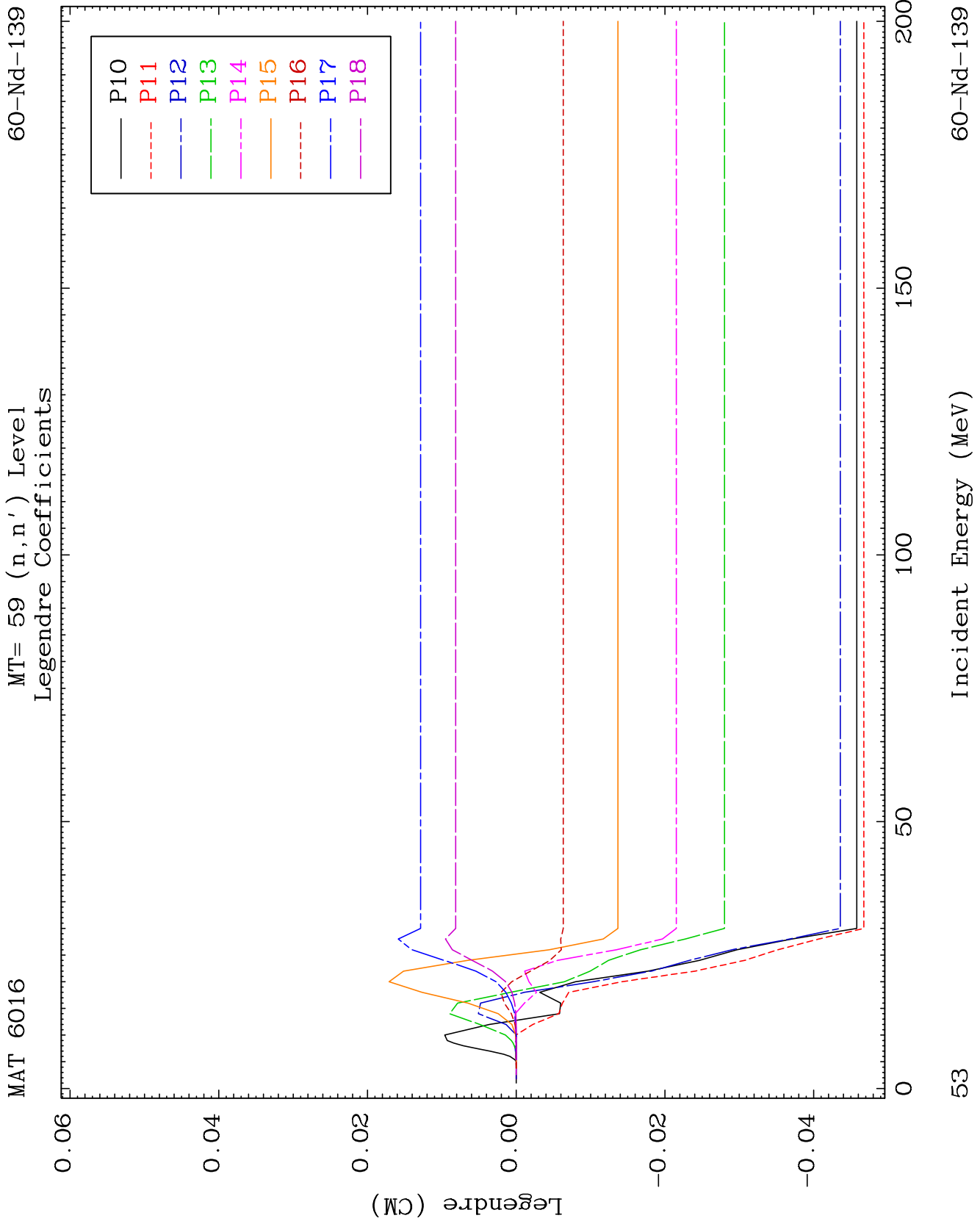
60-Nd-139



52

Incident Energy (MeV)

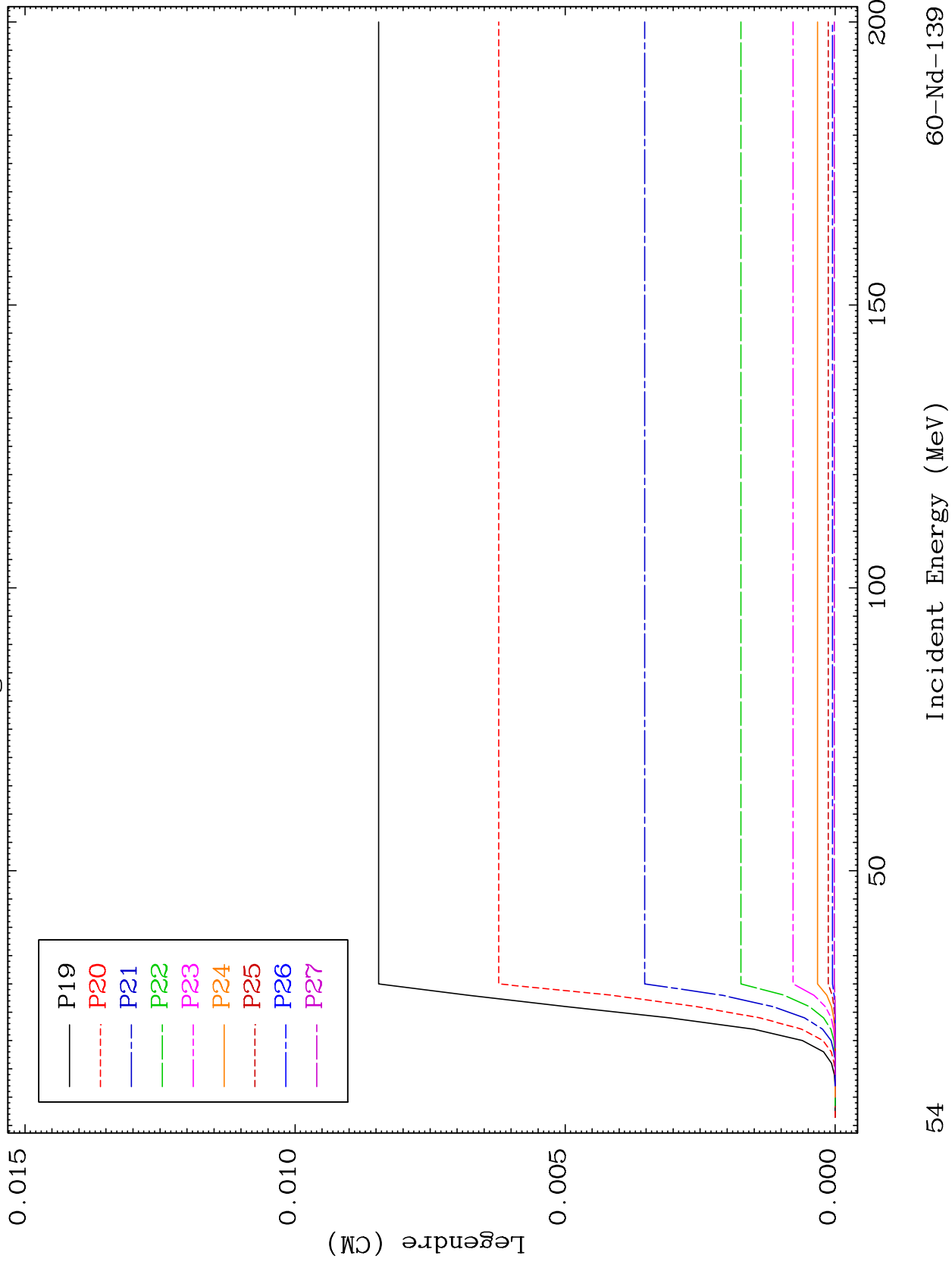
60-Nd-139



MAT 6016

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

60-Nd-139



54

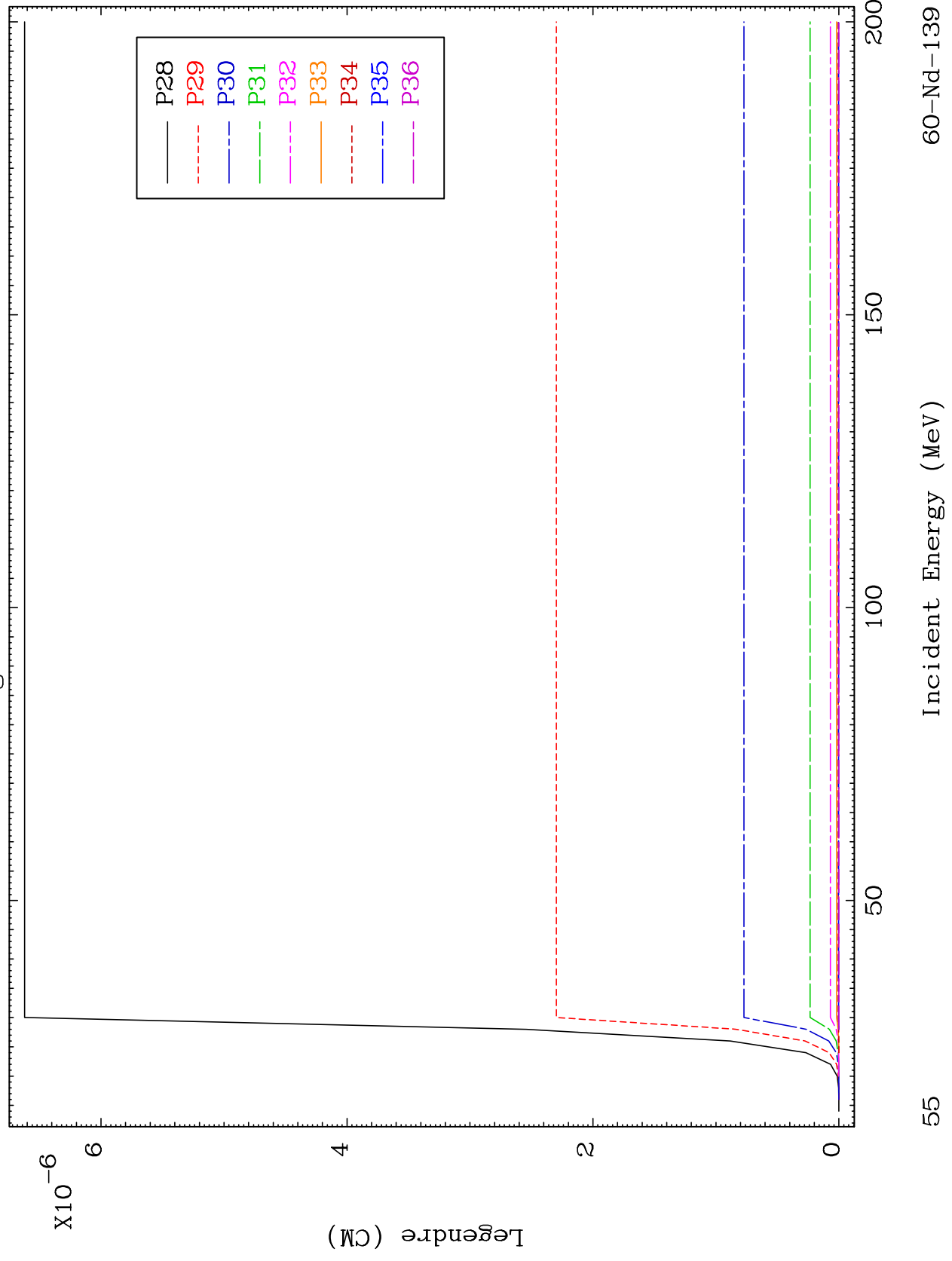
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

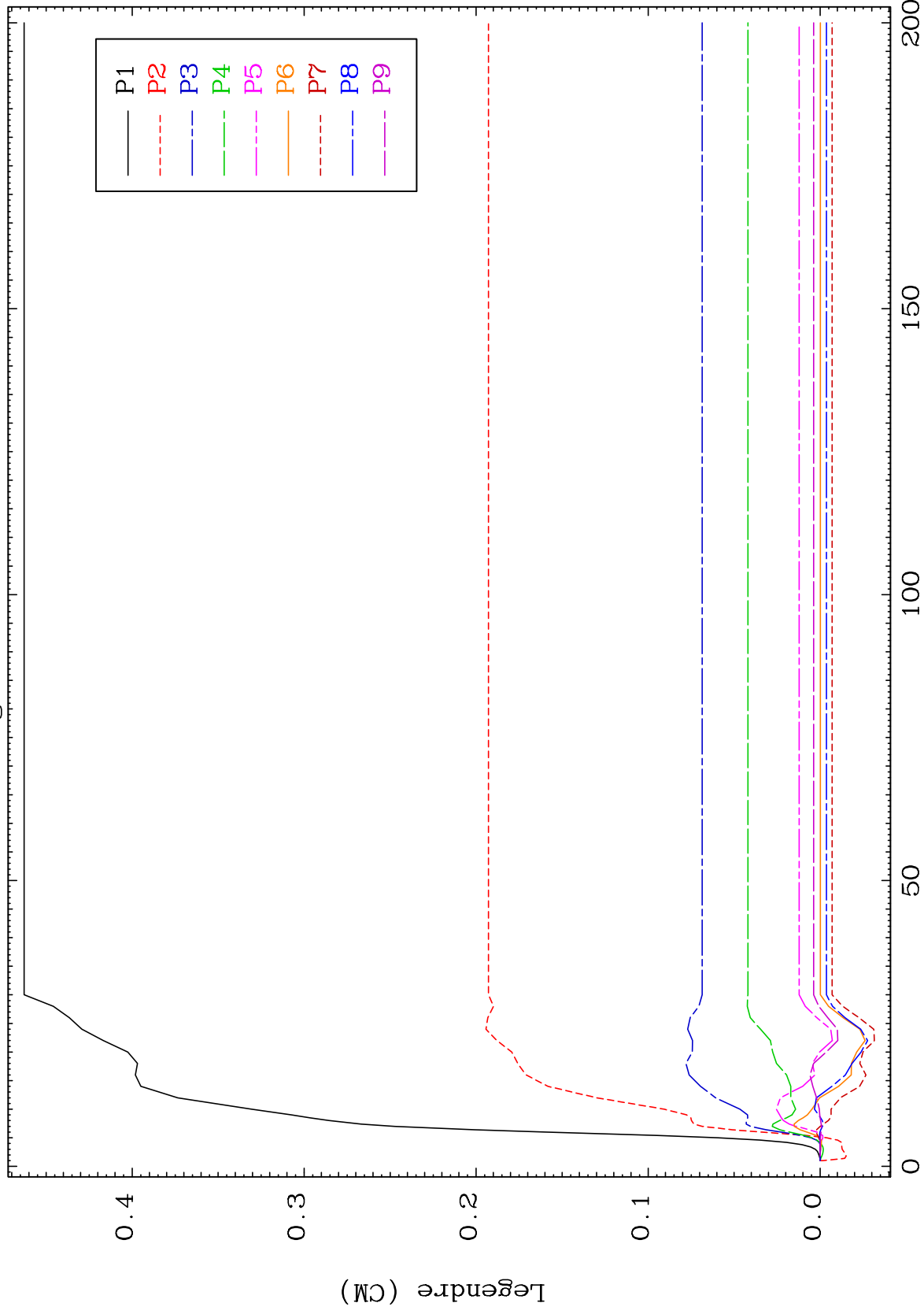
60-Nd-139



MAT 6016

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

60-Nd-139



56

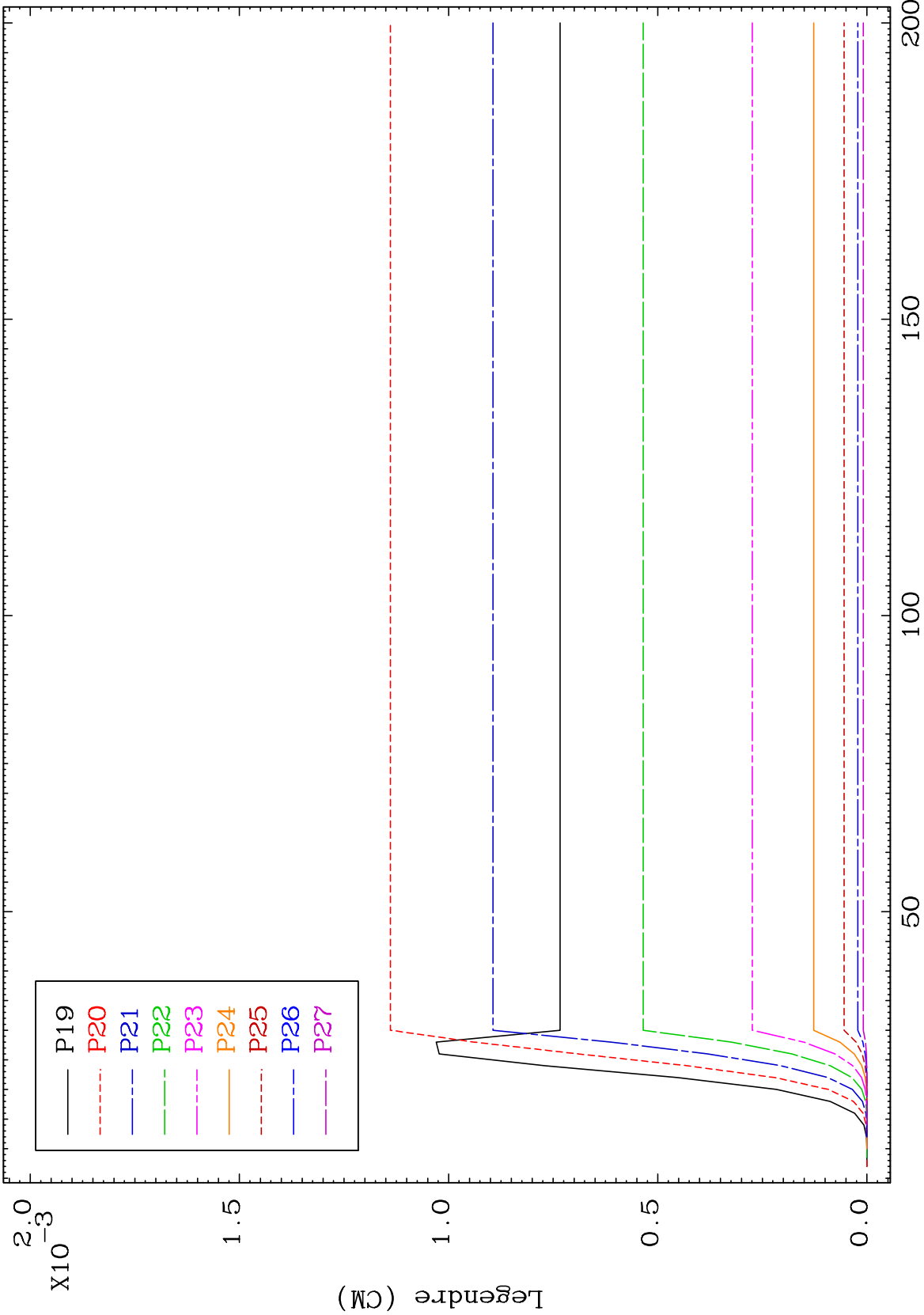
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



58

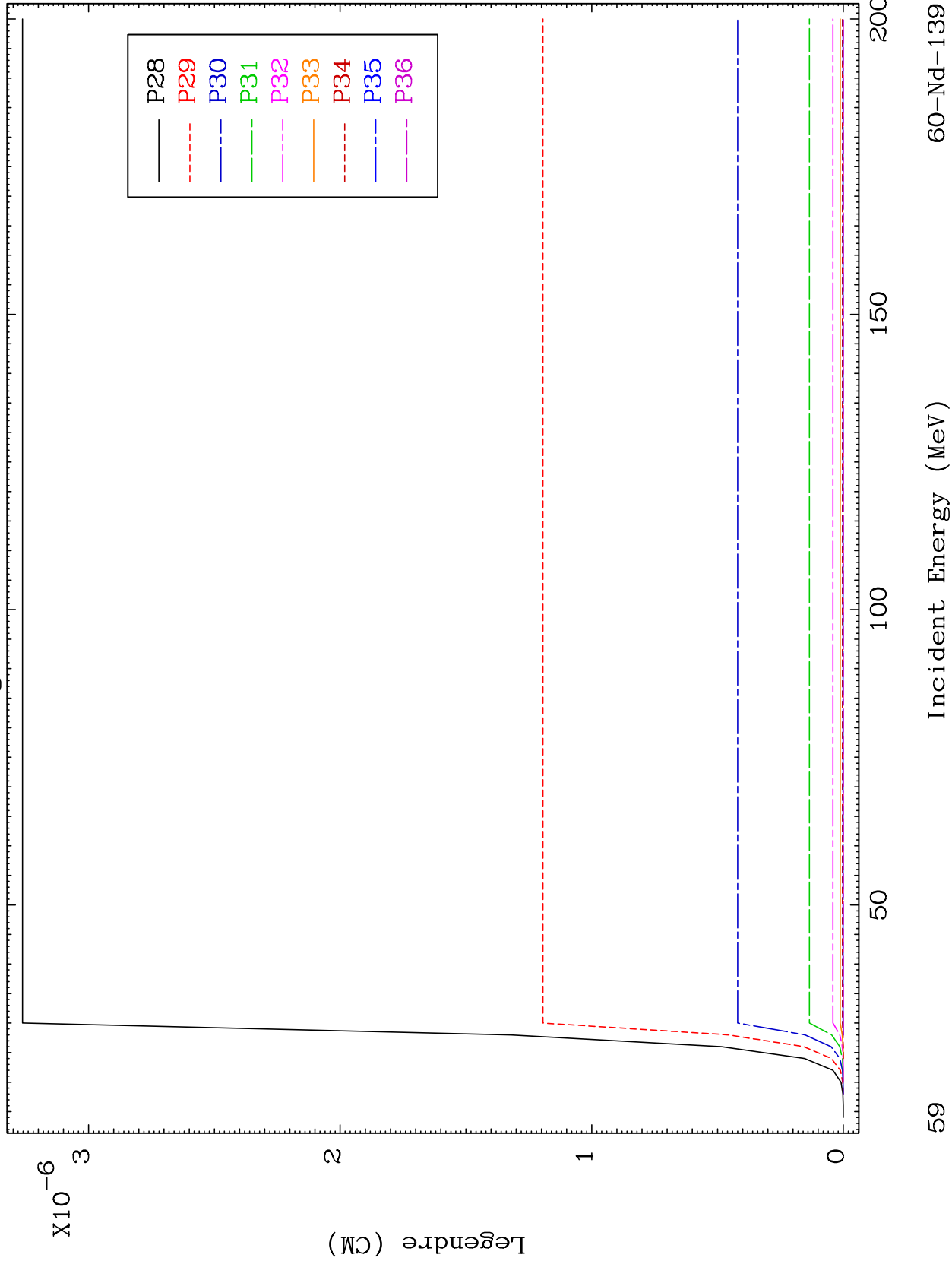
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

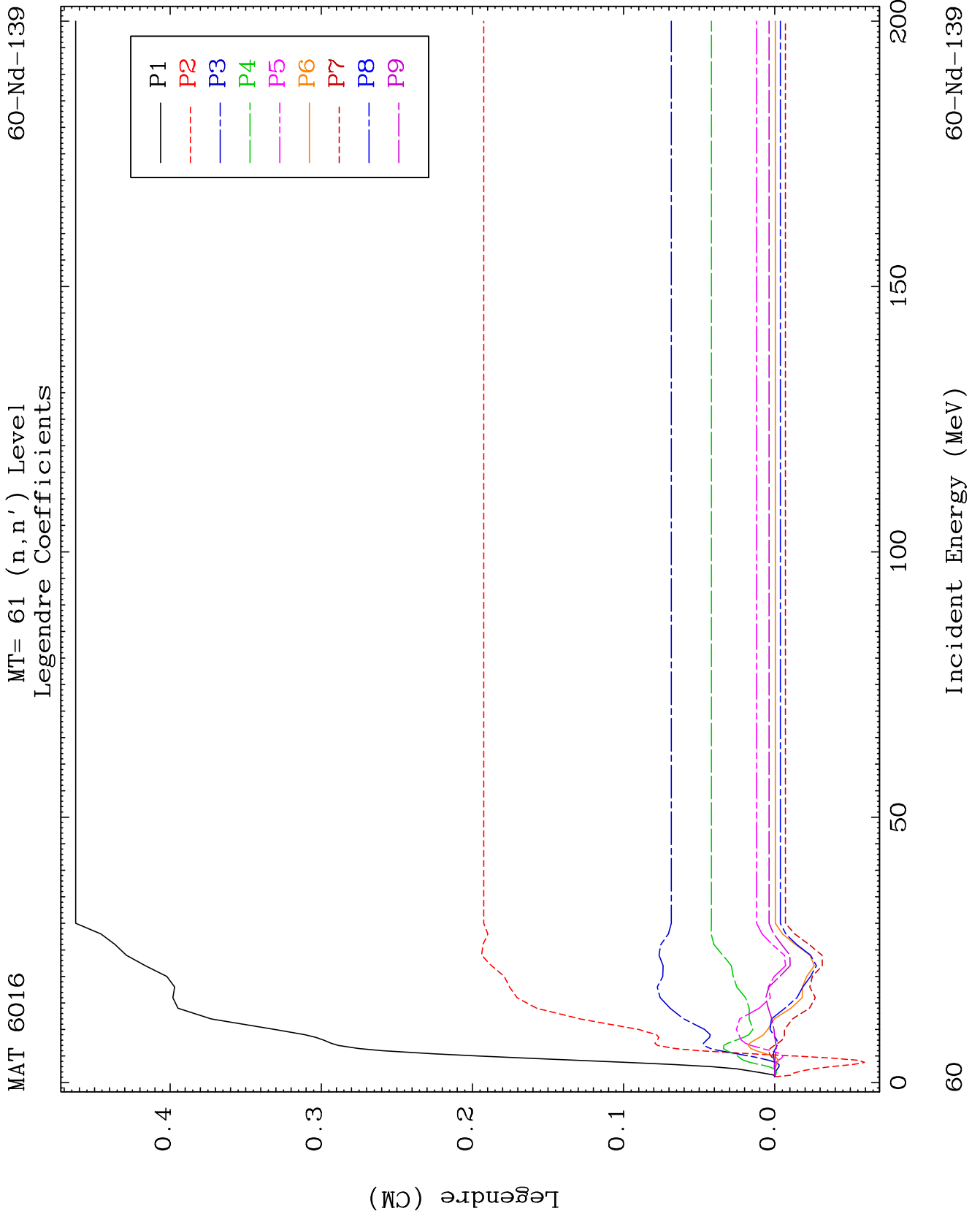
60-Nd-139

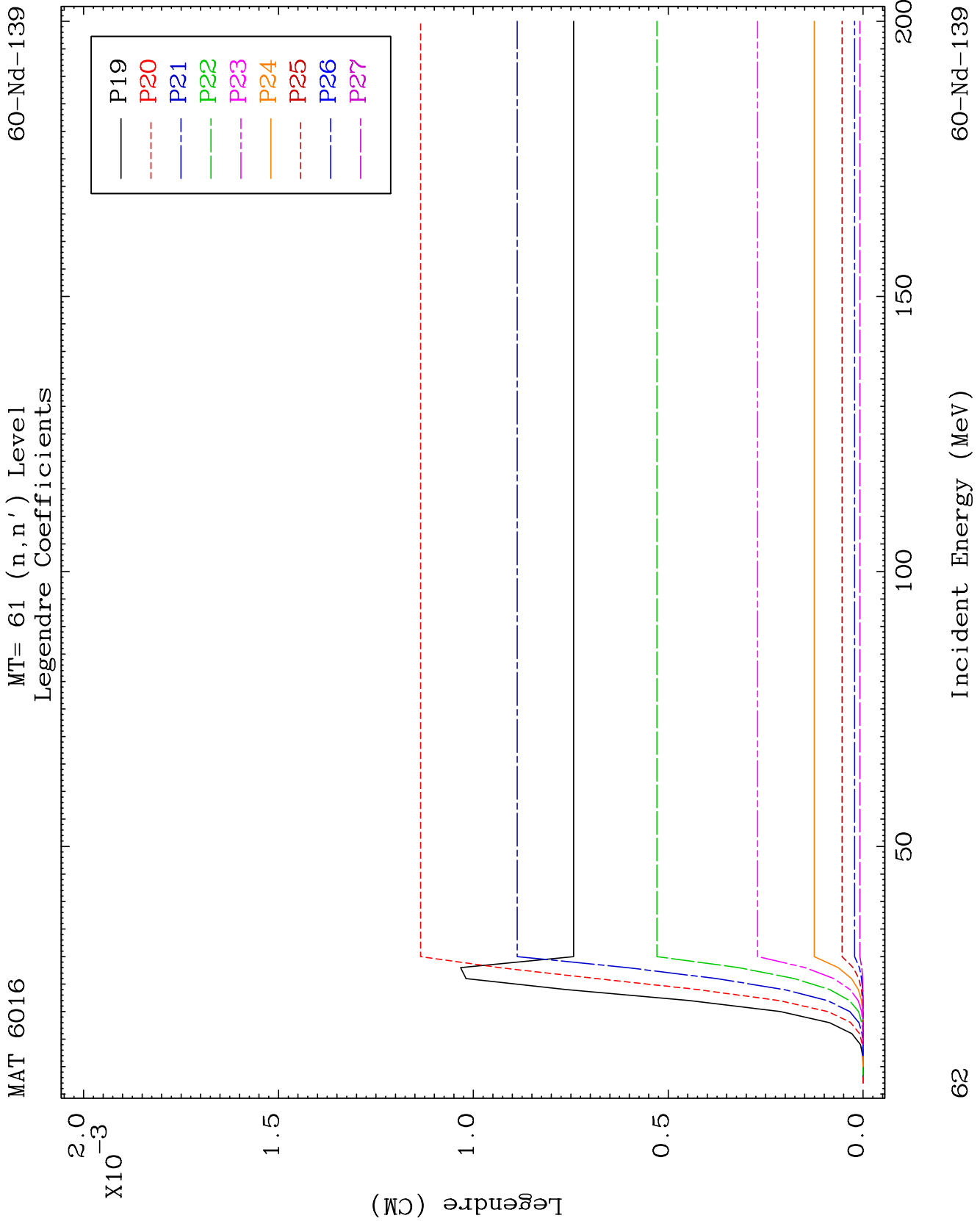


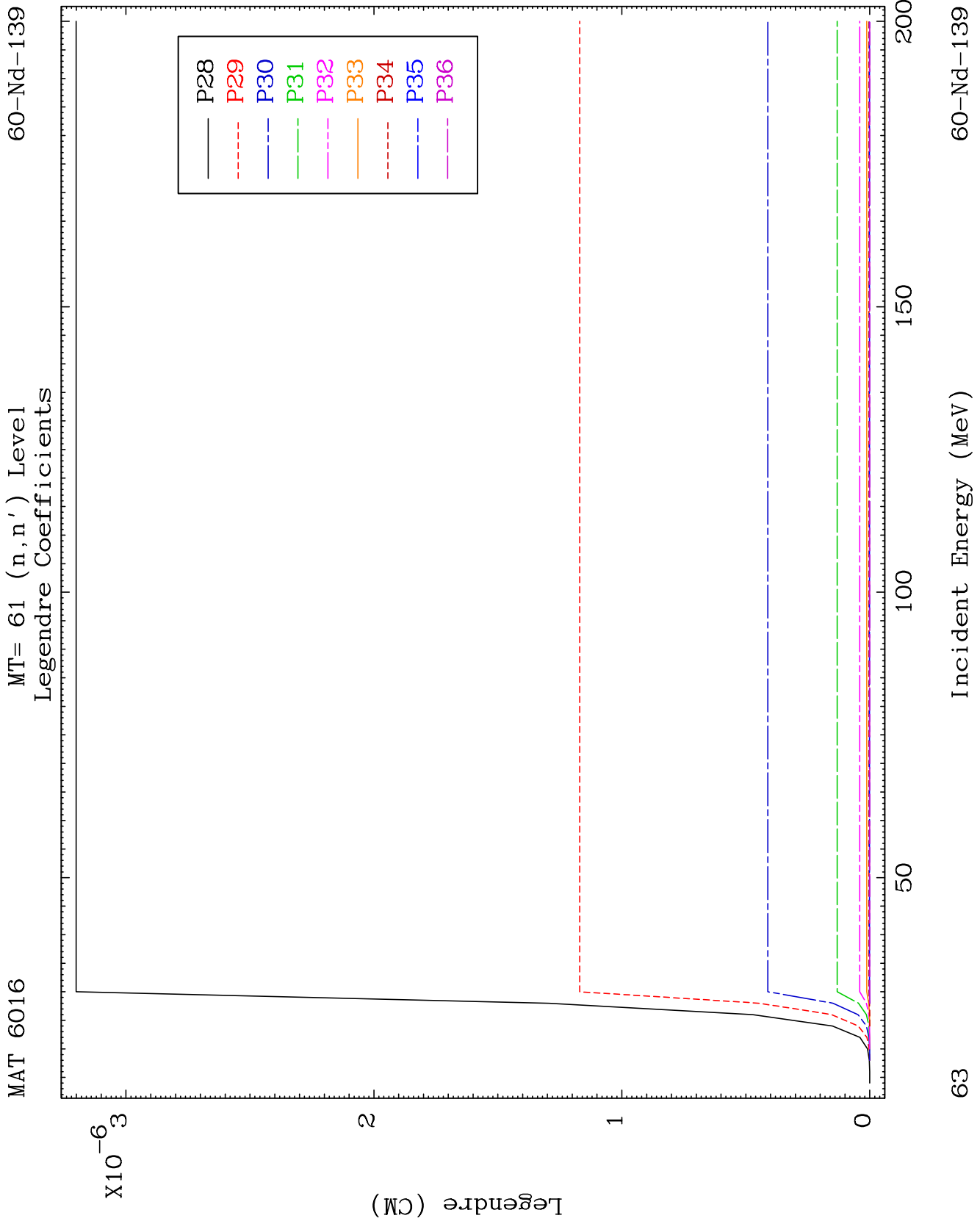
59

Incident Energy (MeV)

60-Nd-139



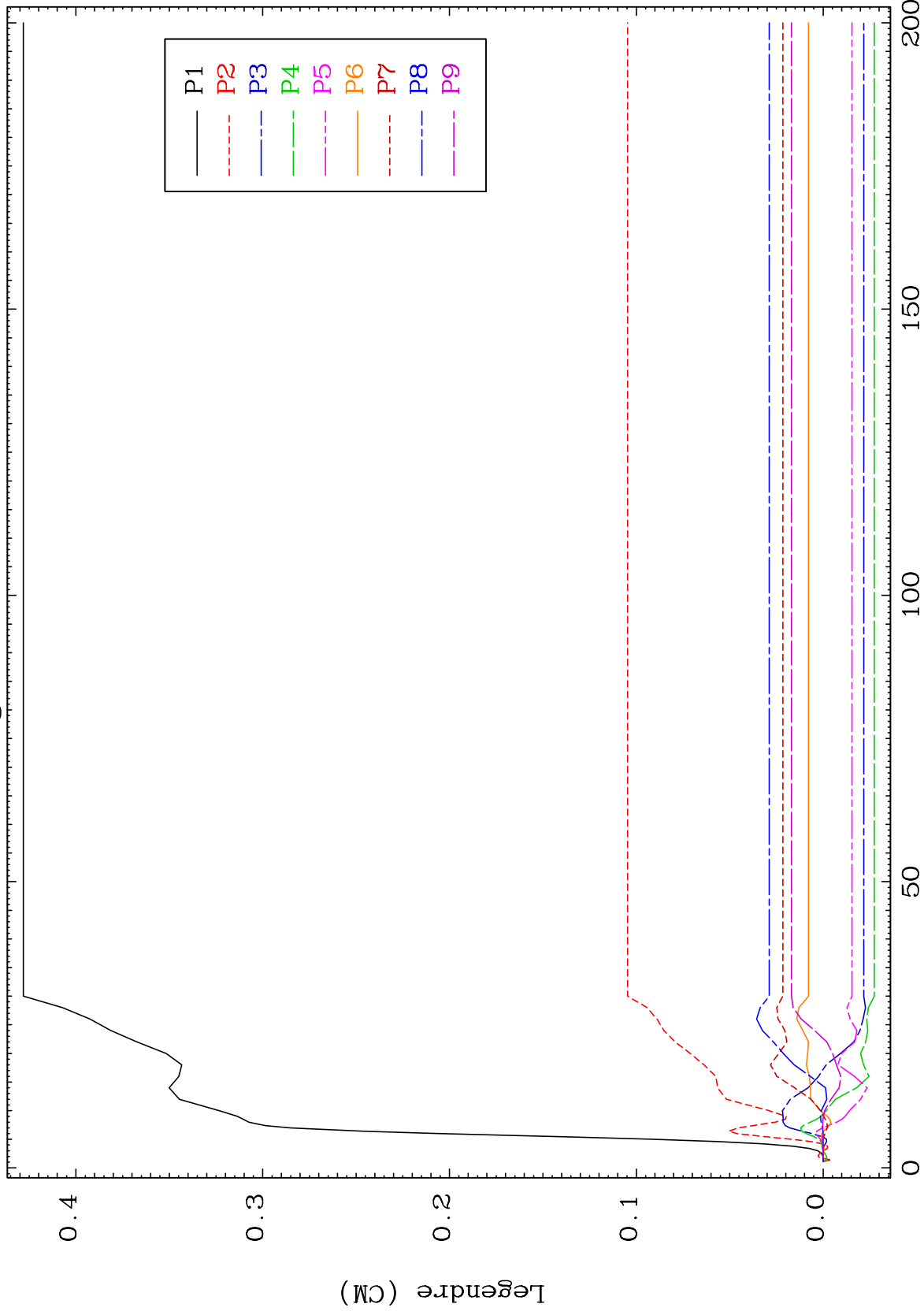




MAT 6016

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

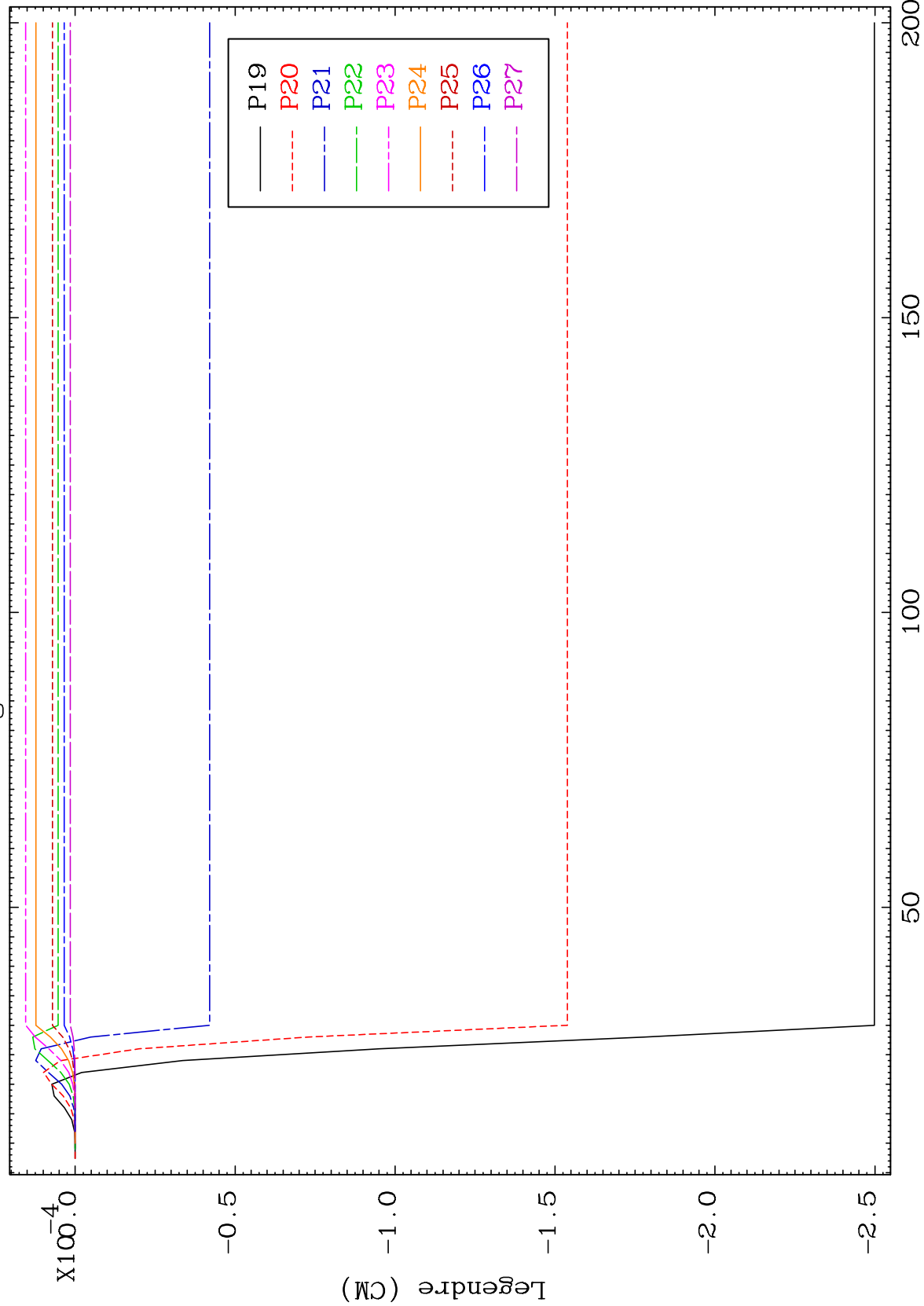
60-Nd-139



60-Nd-139

Incident Energy (MeV)

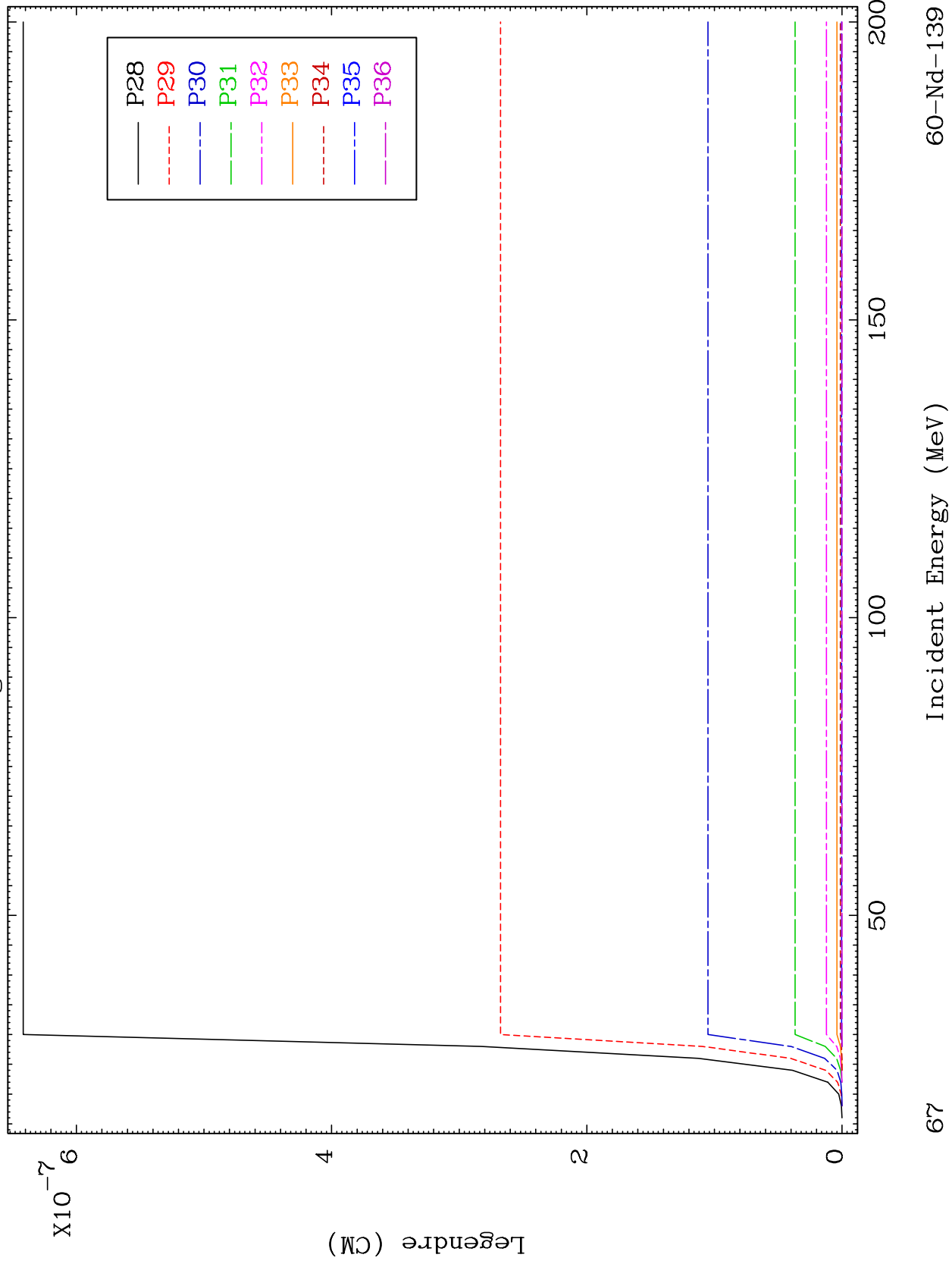
64

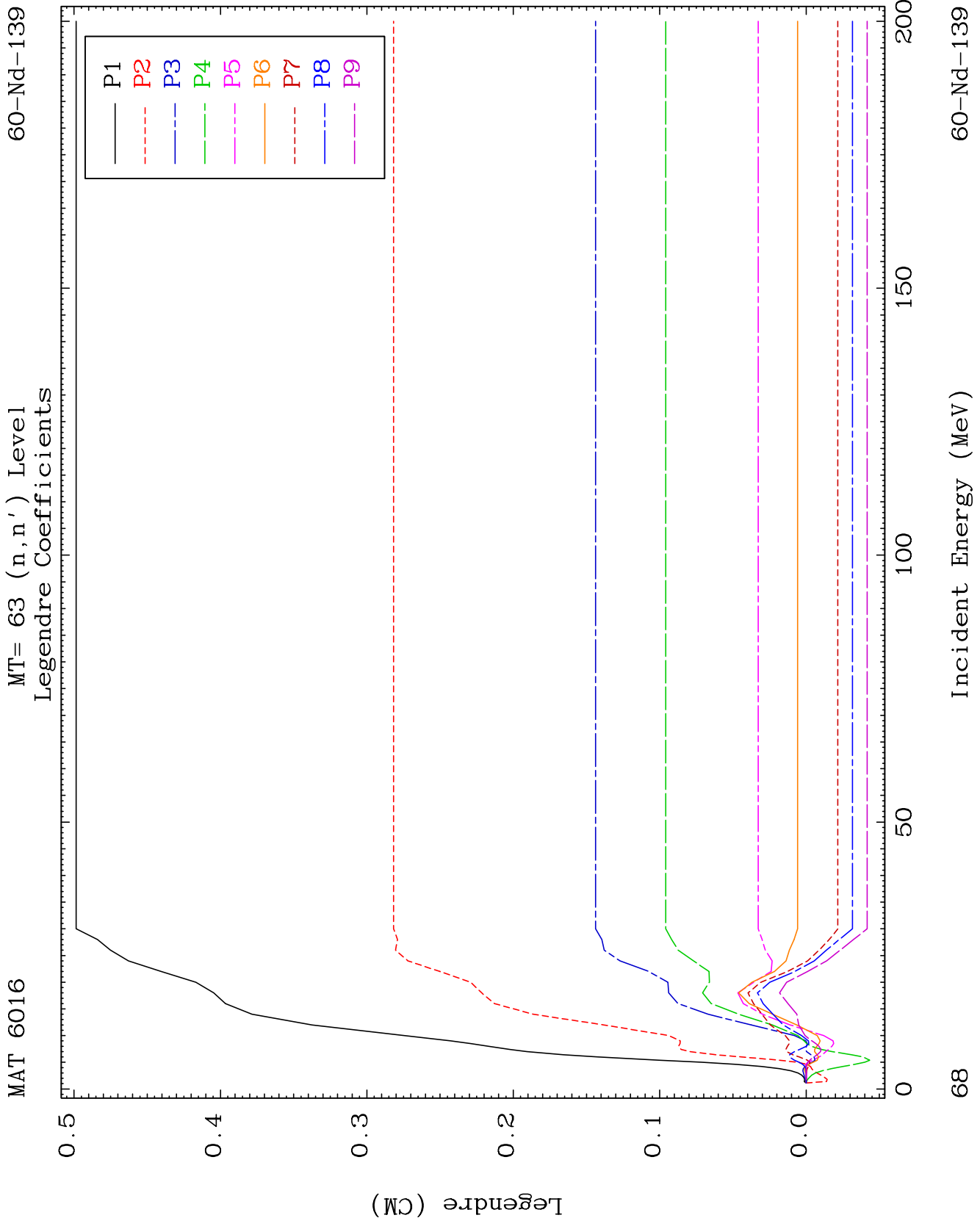


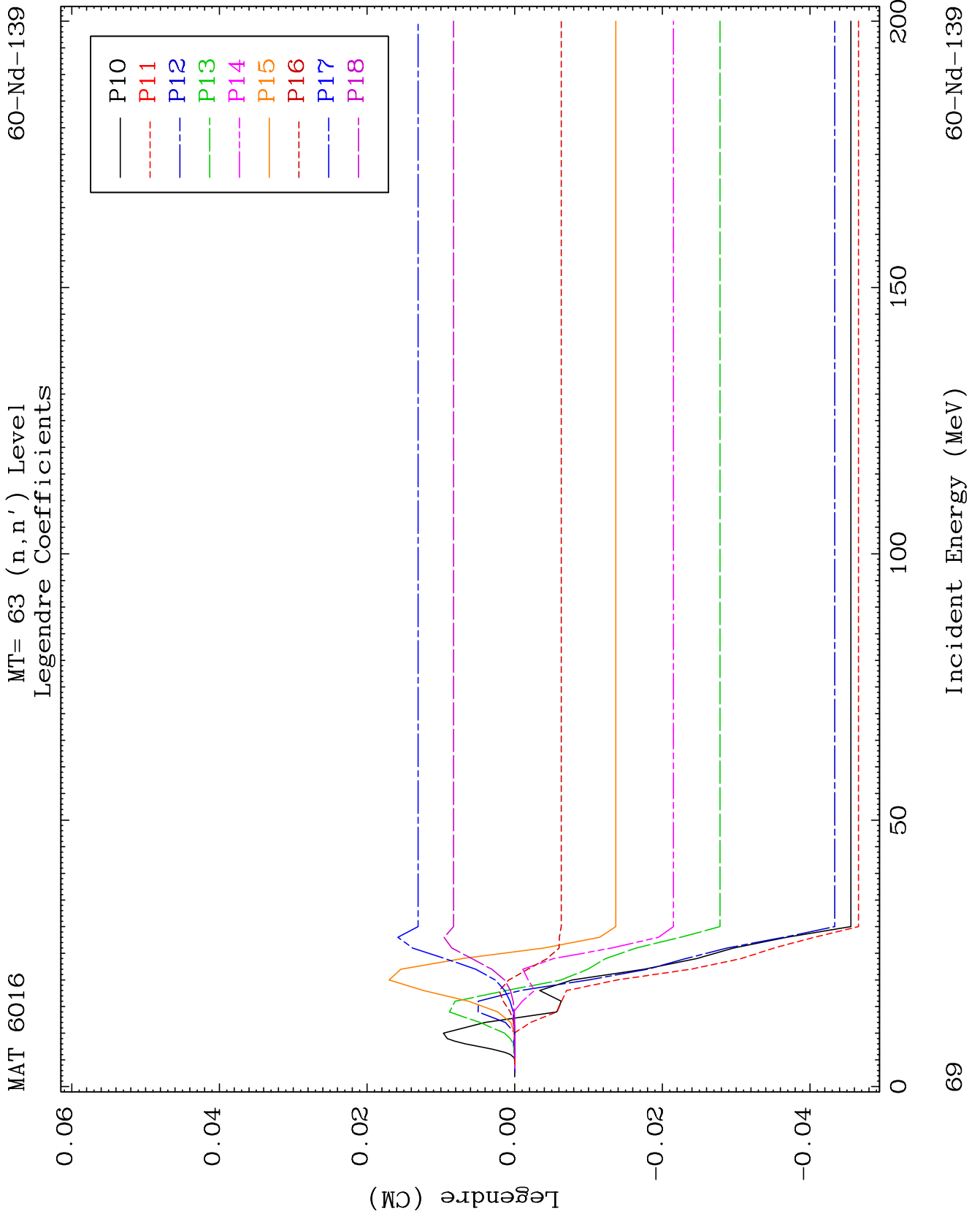
MAT 6016

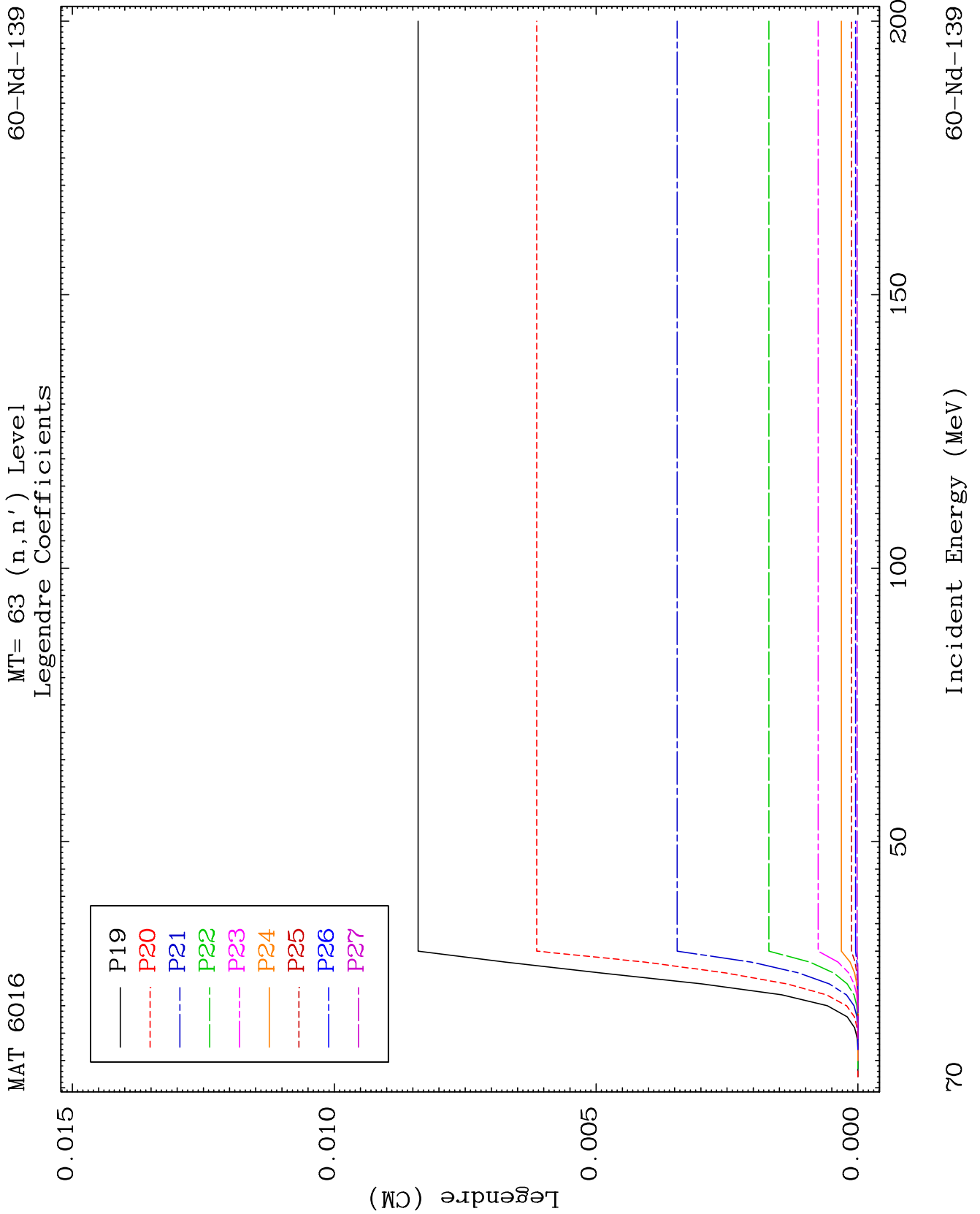
MT= 62 (n,n') Level
Legendre Coefficients

60-Nd-139





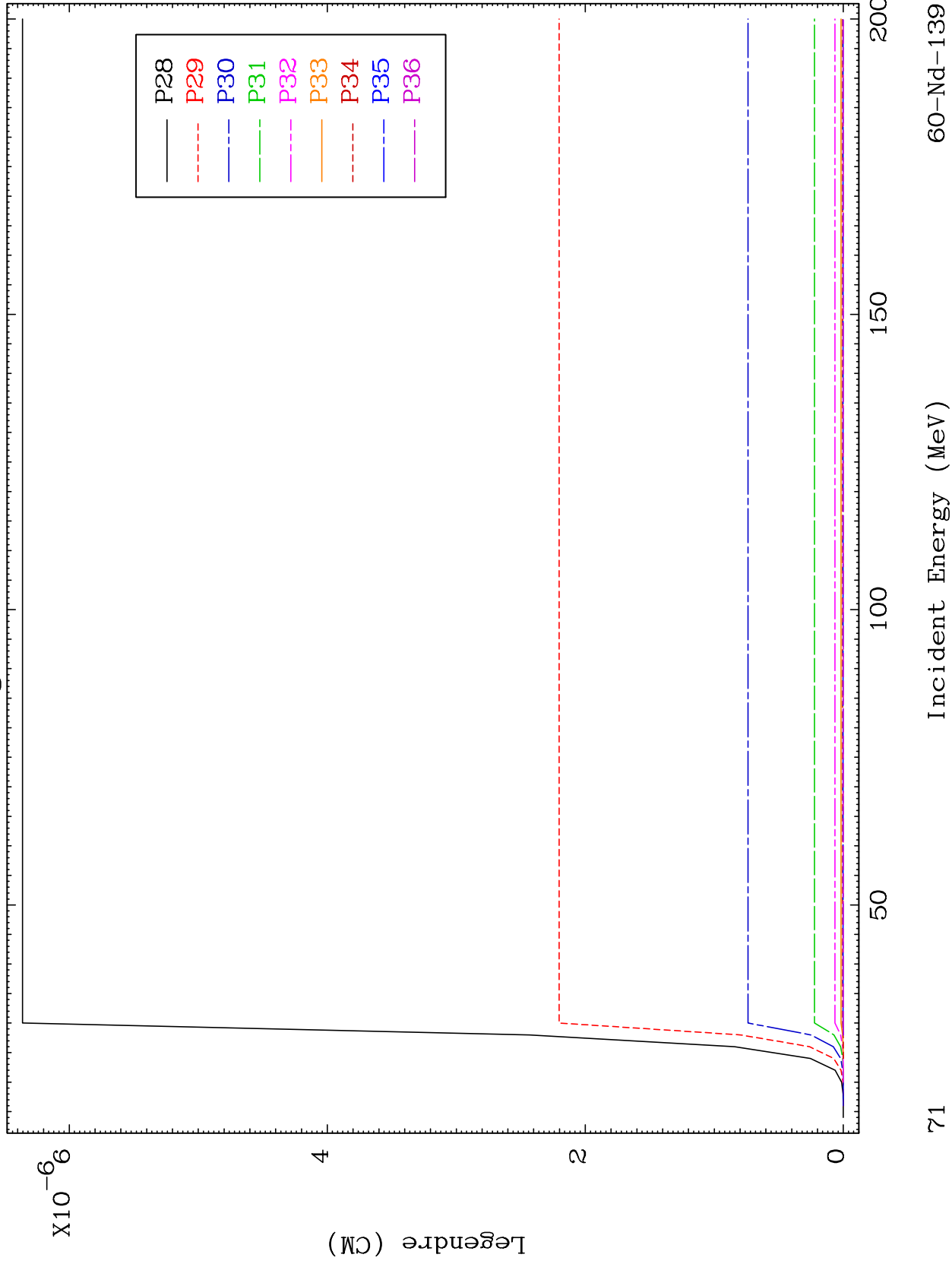


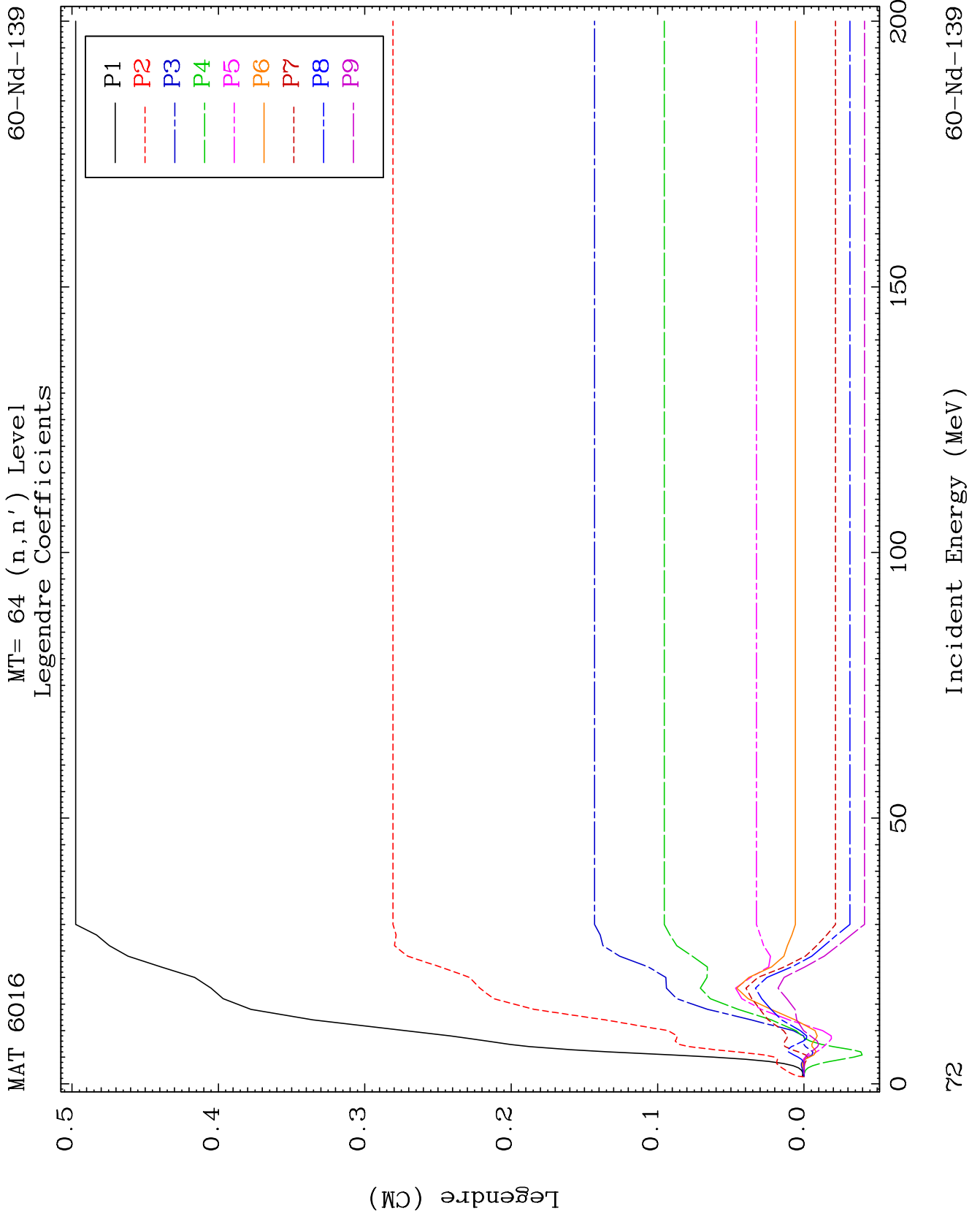


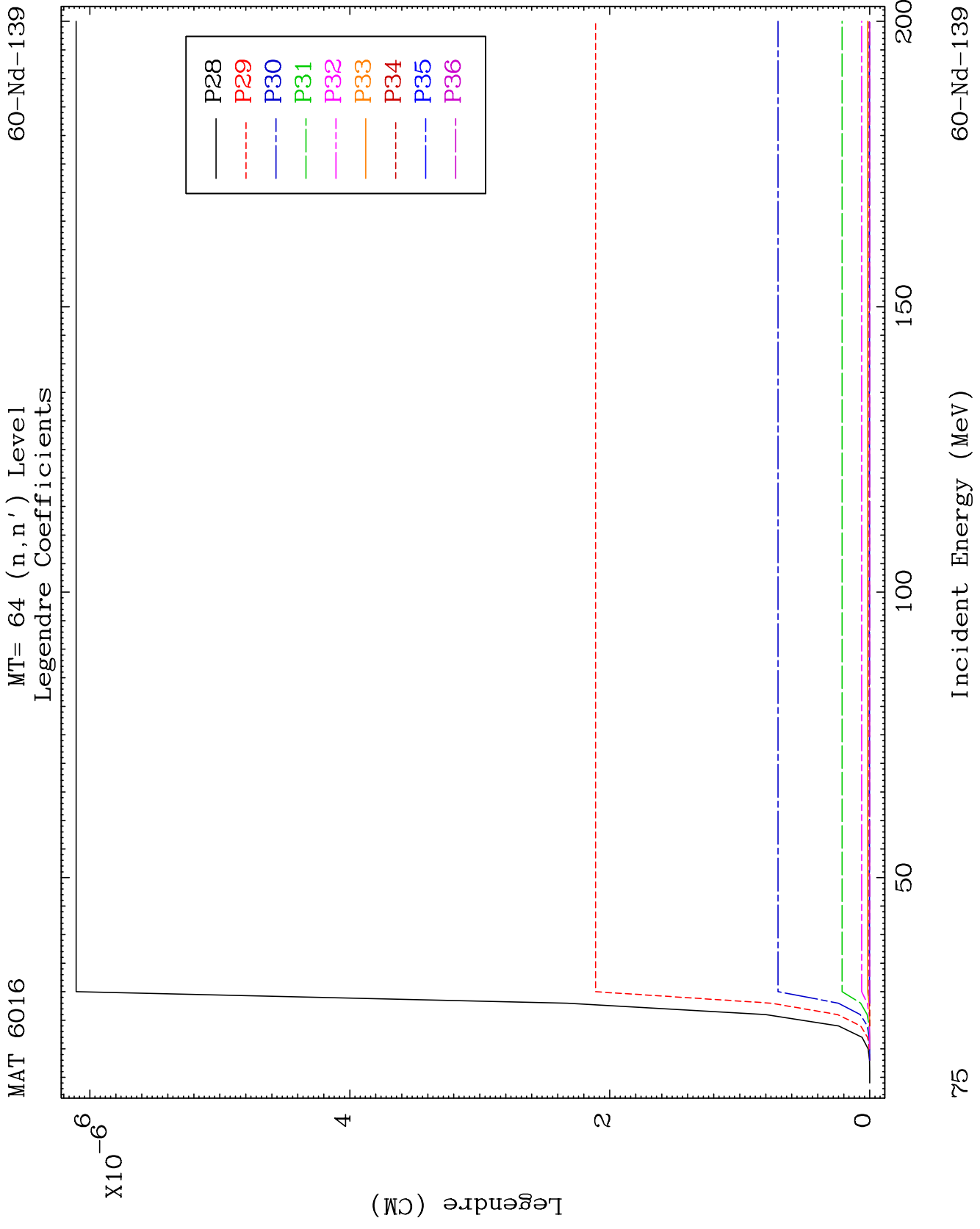
MAT 6016

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

60-Nd-139



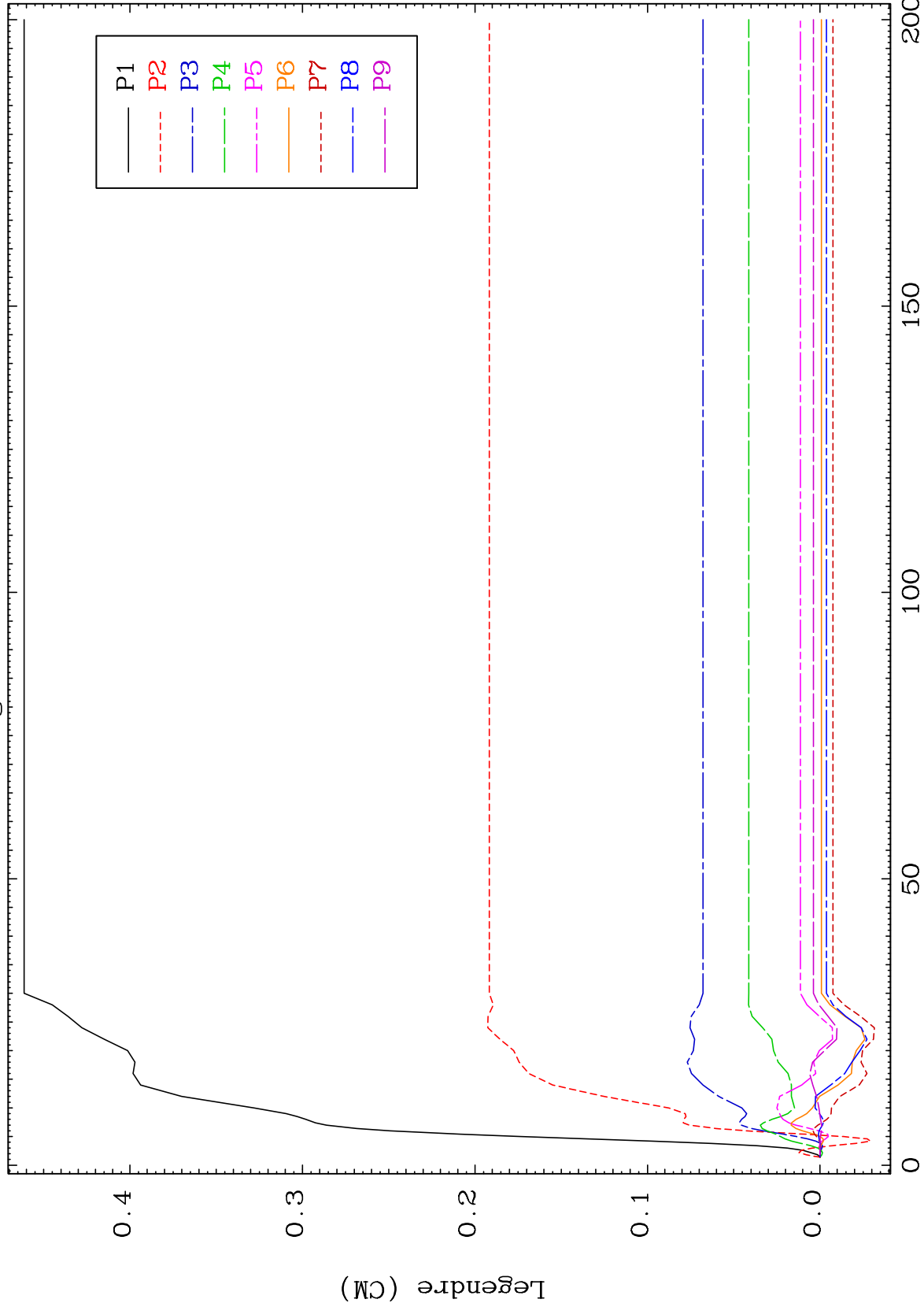




MAT 6016

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

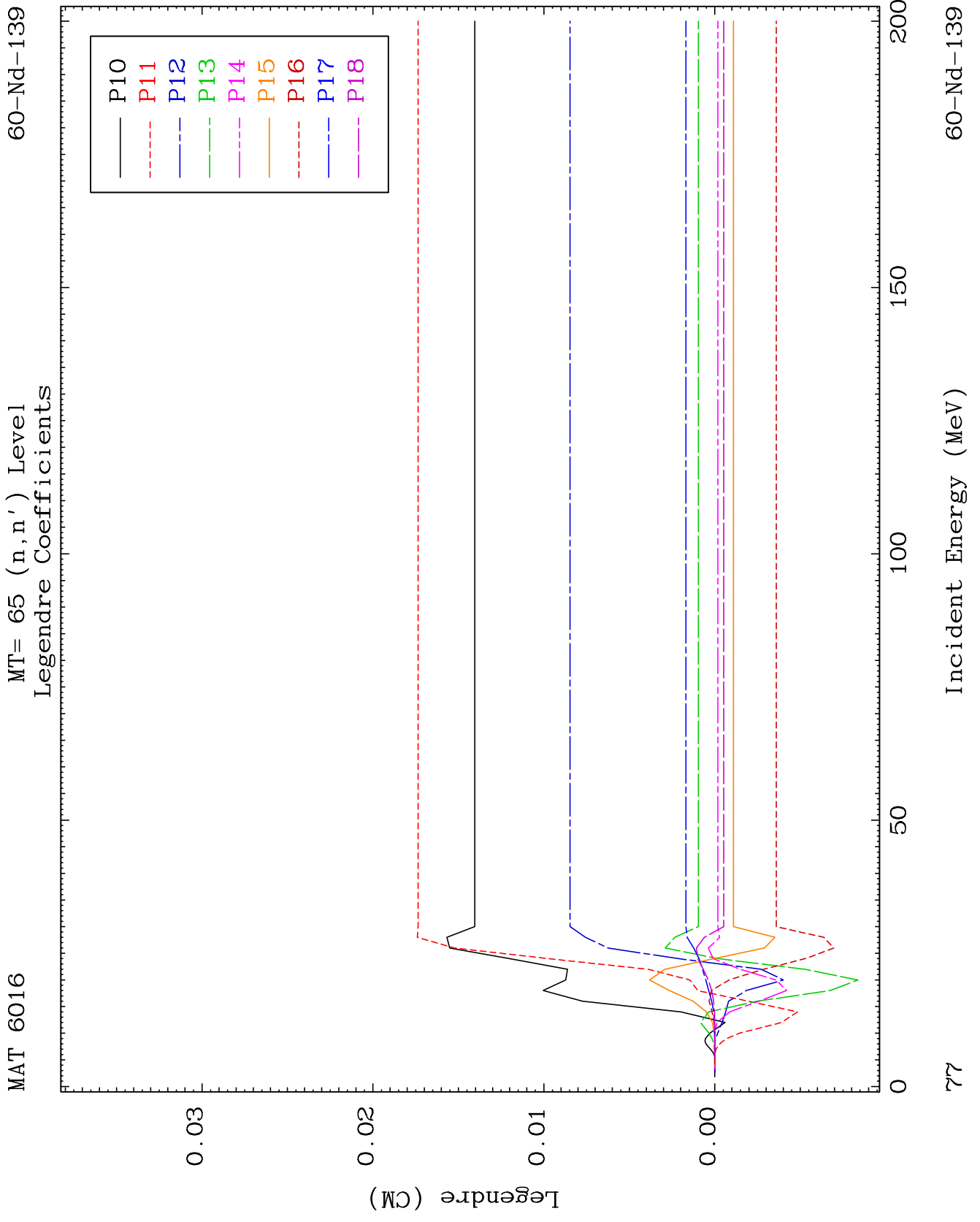
60-Nd-139



76

Incident Energy (MeV)

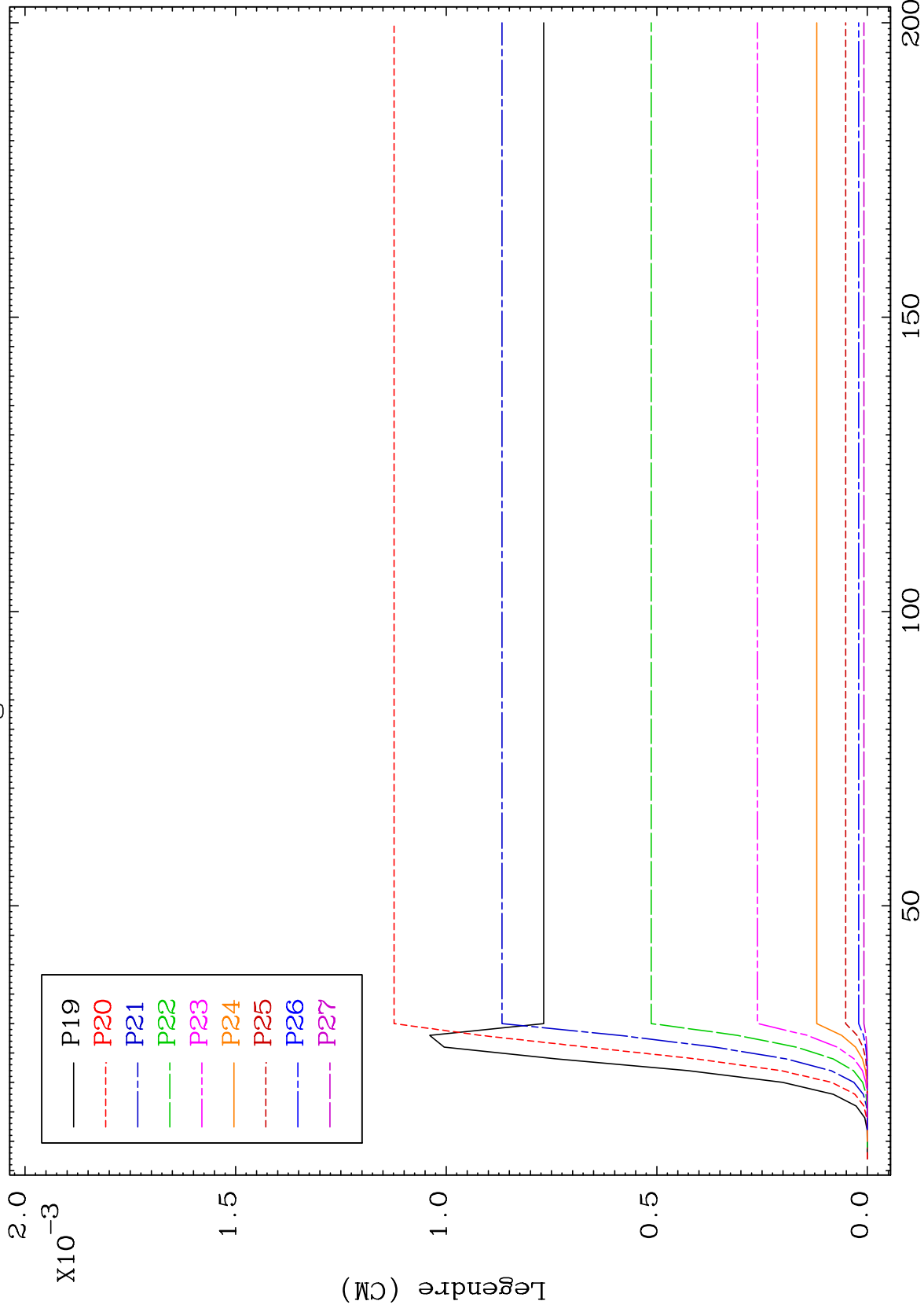
60-Nd-139



MAT 6016

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

60-Nd-139



78

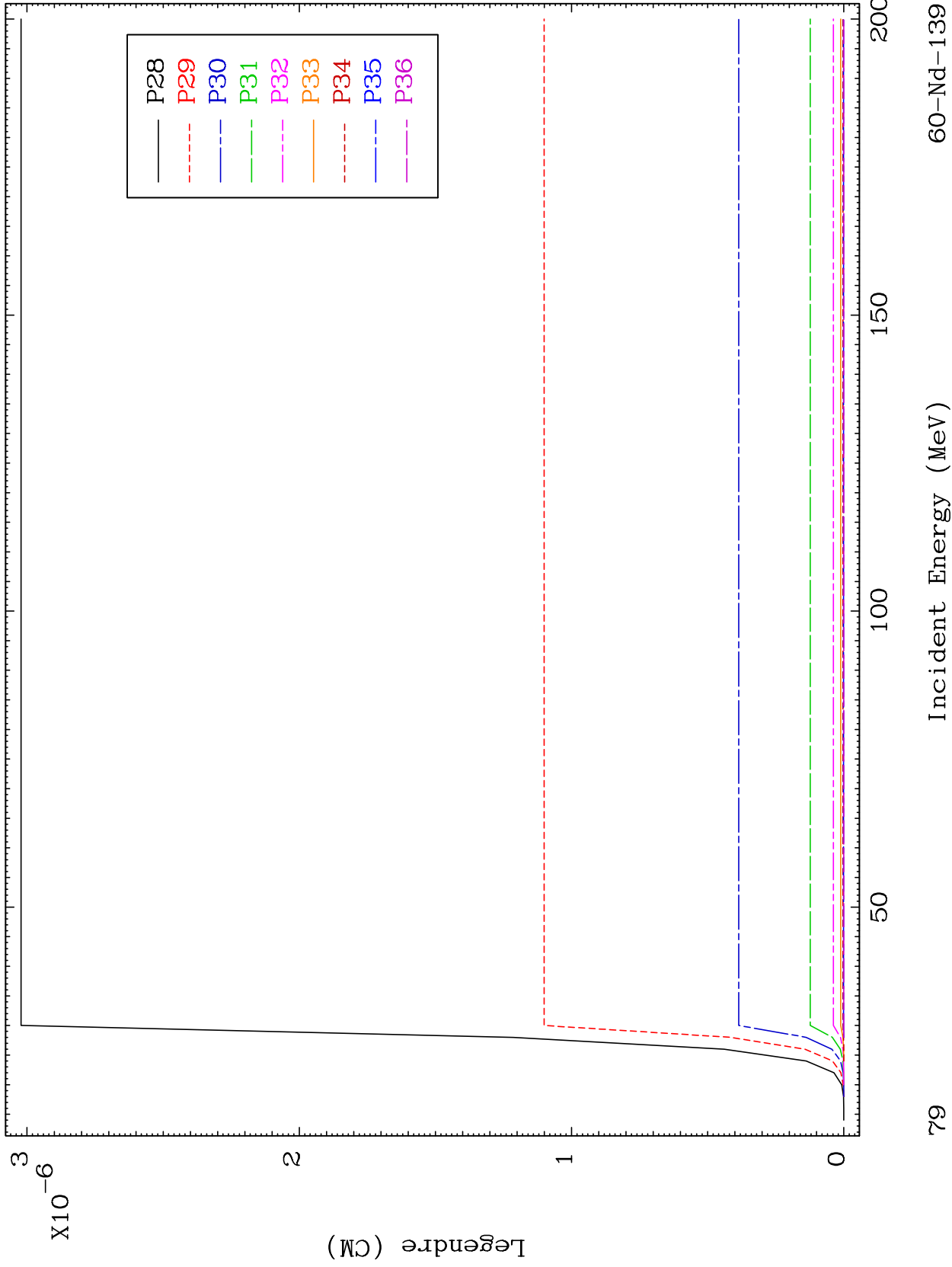
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

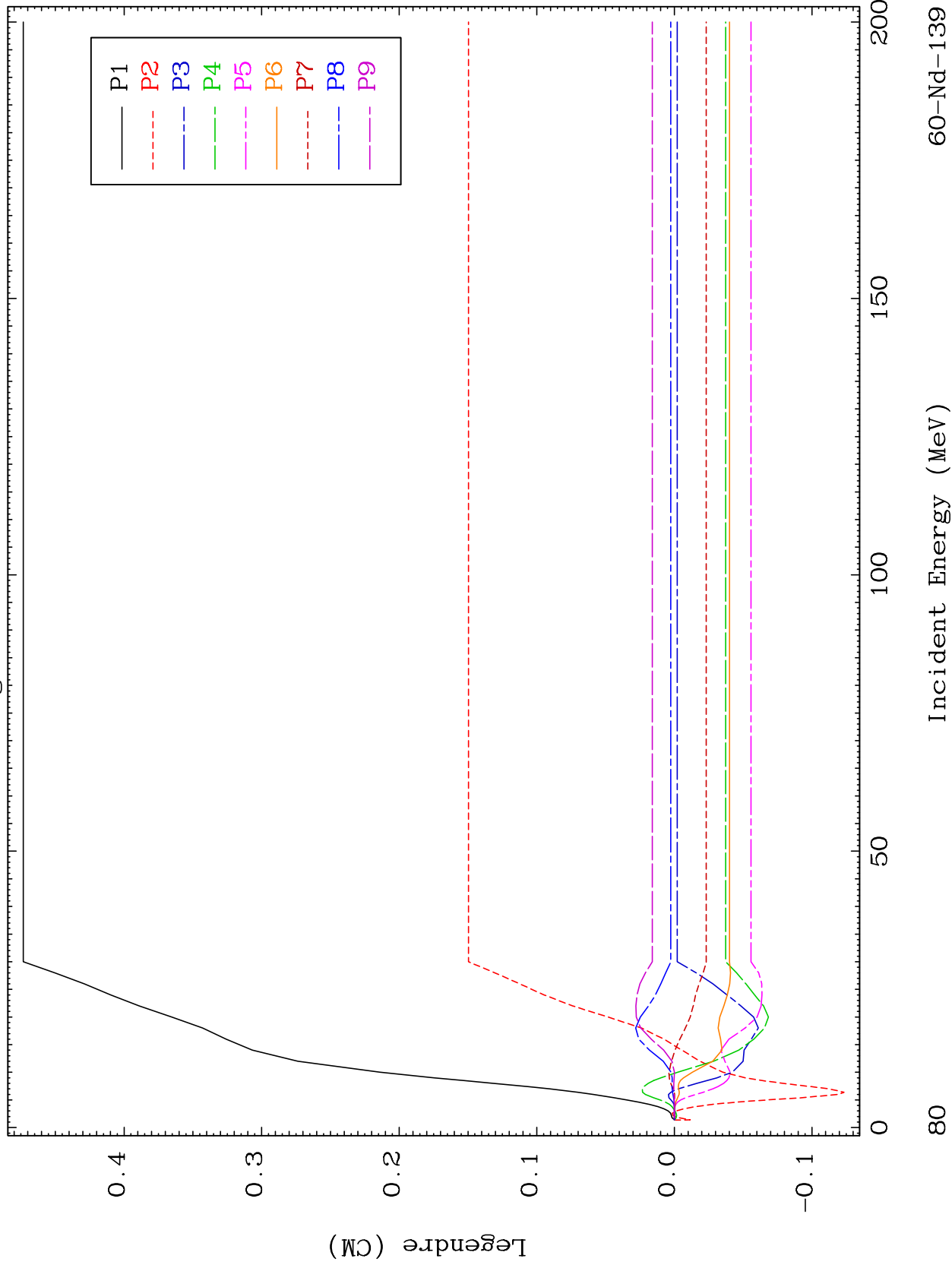
60-Nd-139



MAT 6016

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

60-Nd-139

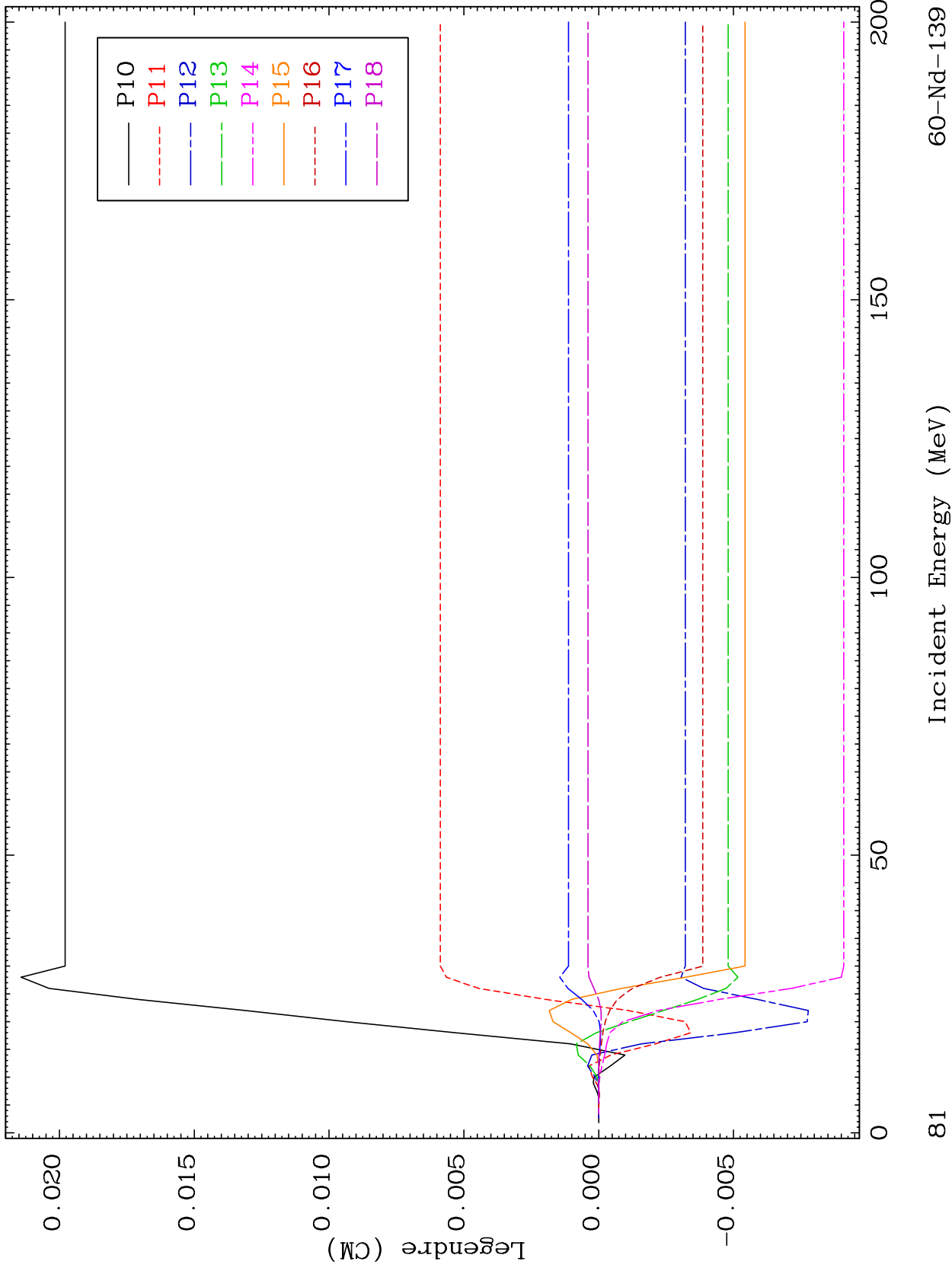


60-Nd-139

MAT 6016

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

60-Nd-139



81

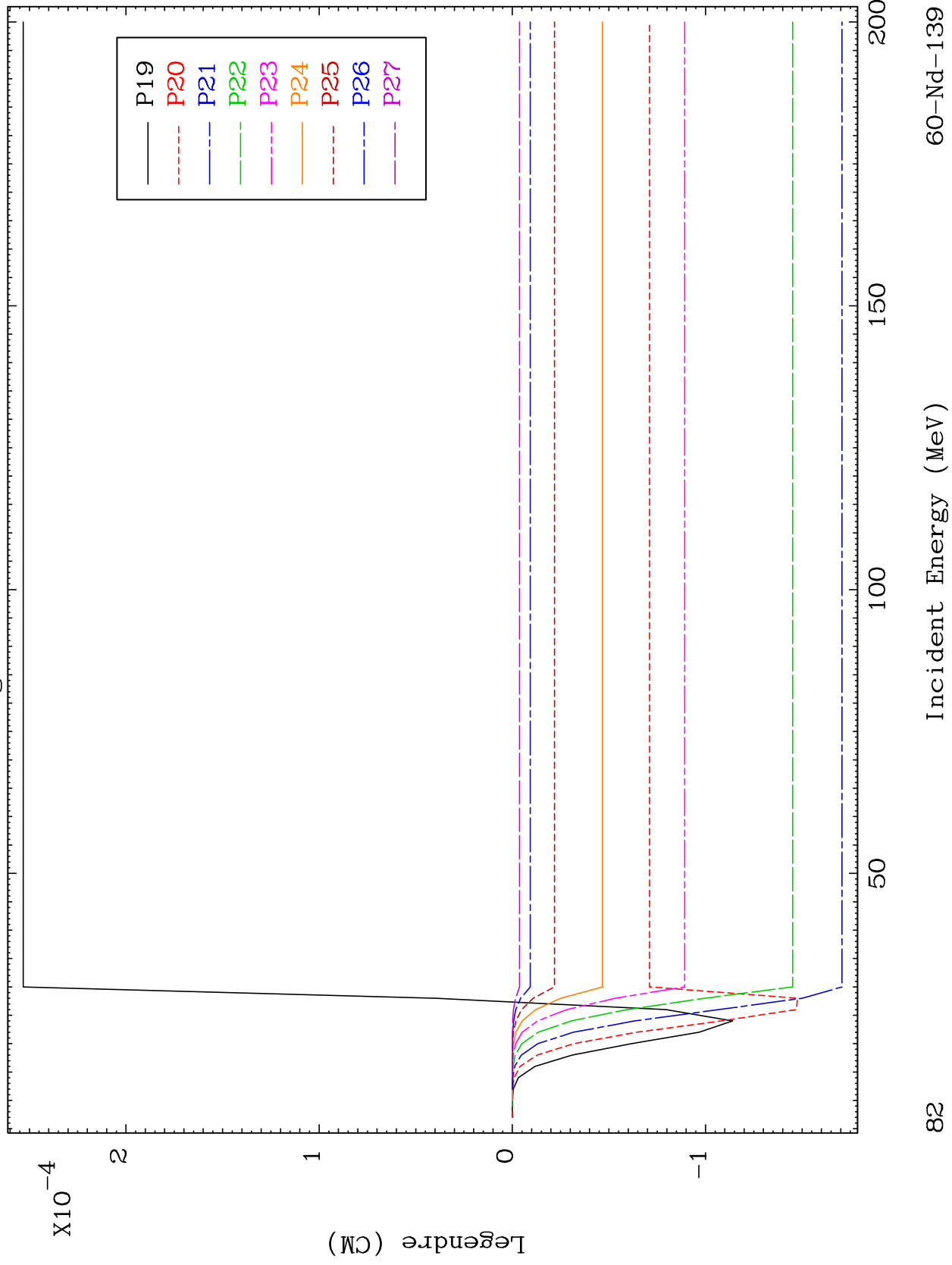
Incident Energy (MeV)

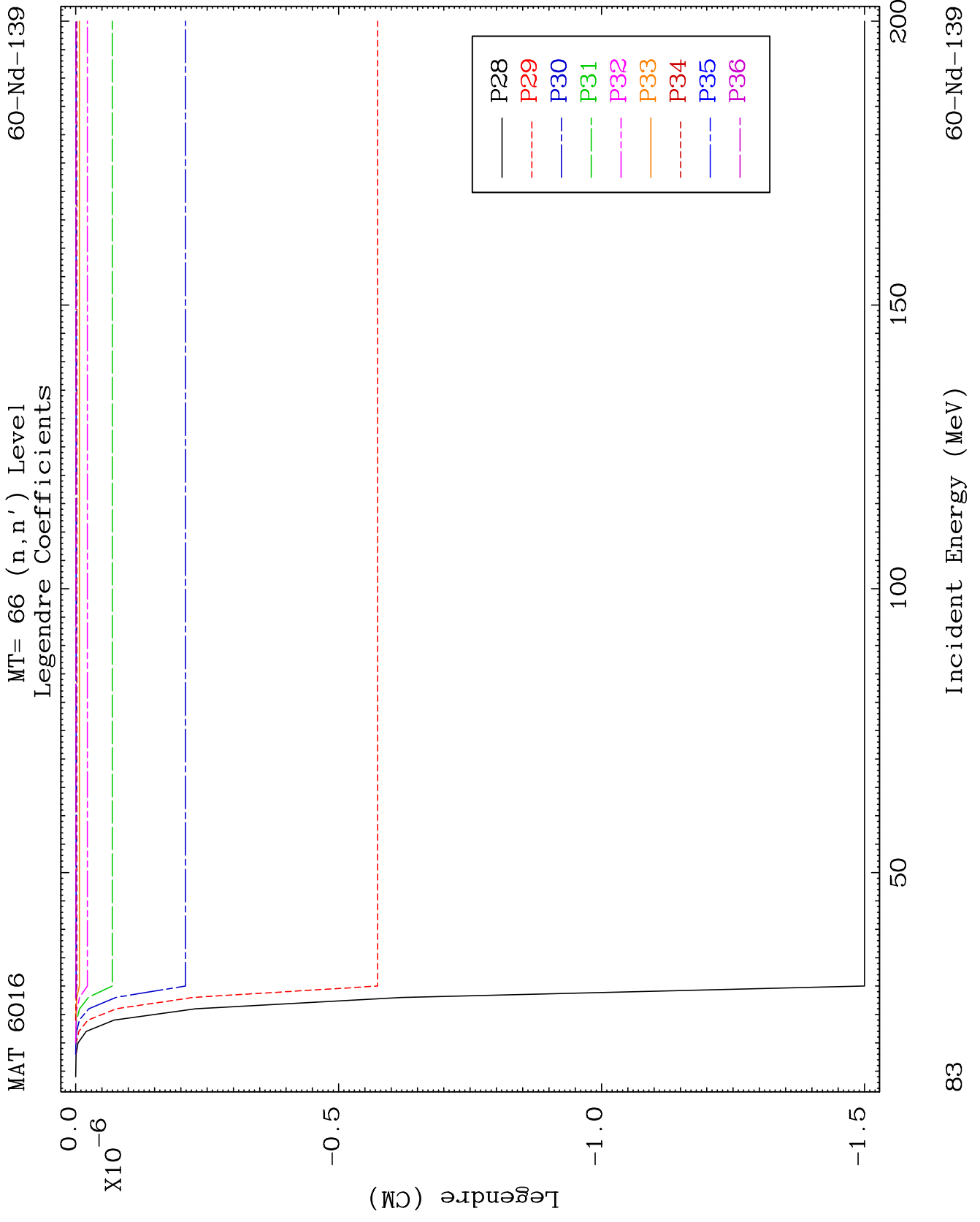
60-Nd-139

MAT 6016

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

60-Nd-139

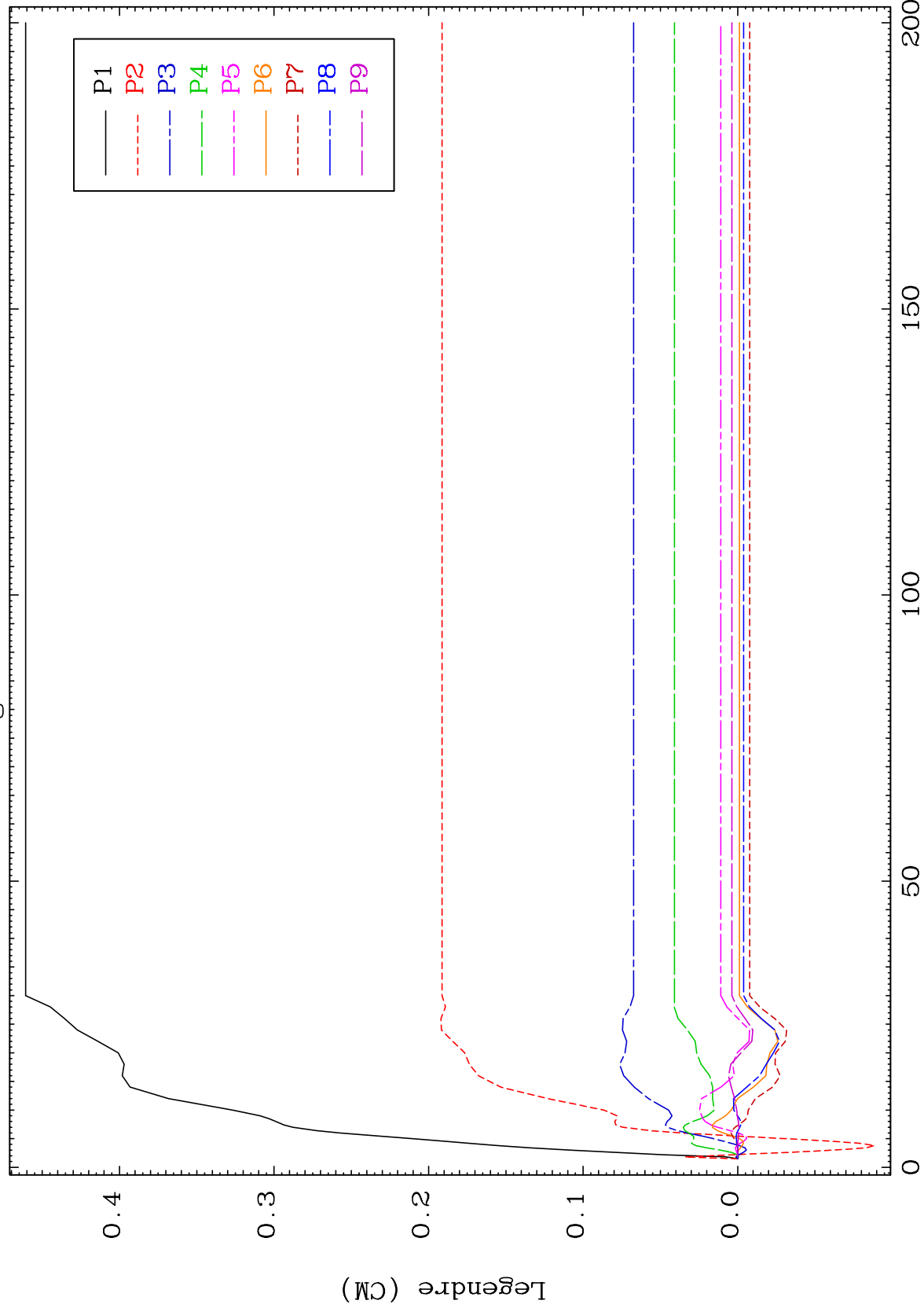




MAT 6016

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

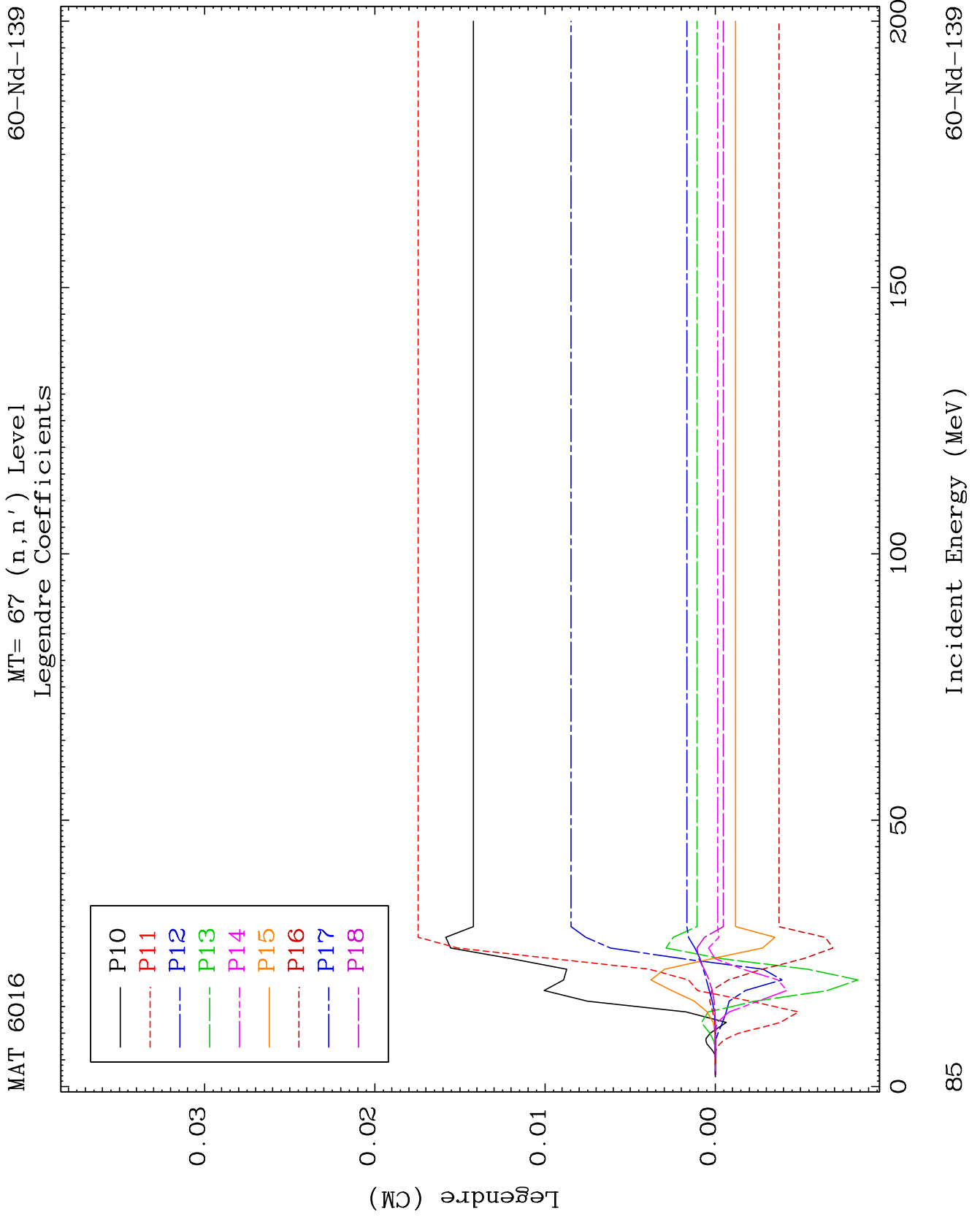
60-Nd-139

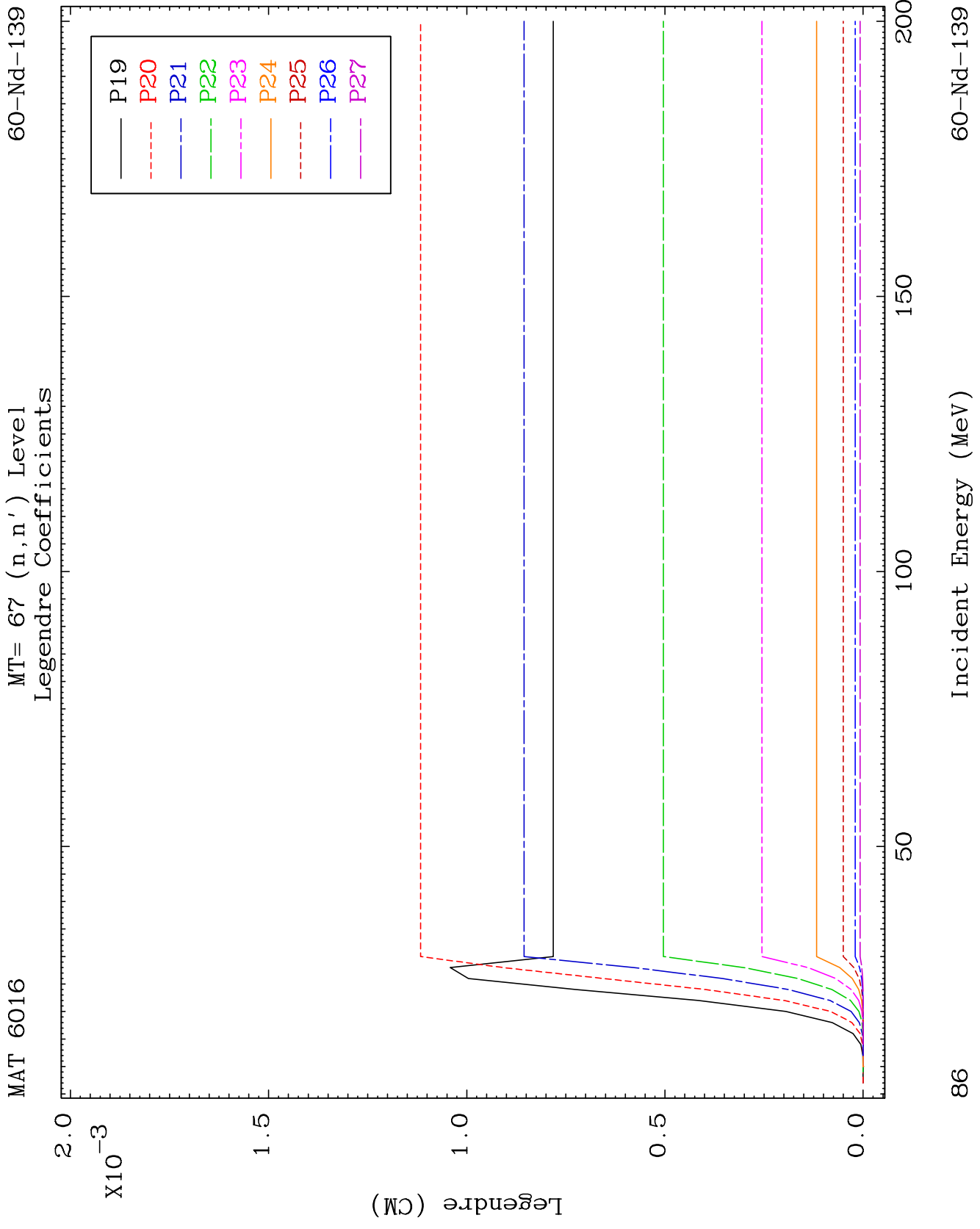


84

Incident Energy (MeV)

60-Nd-139

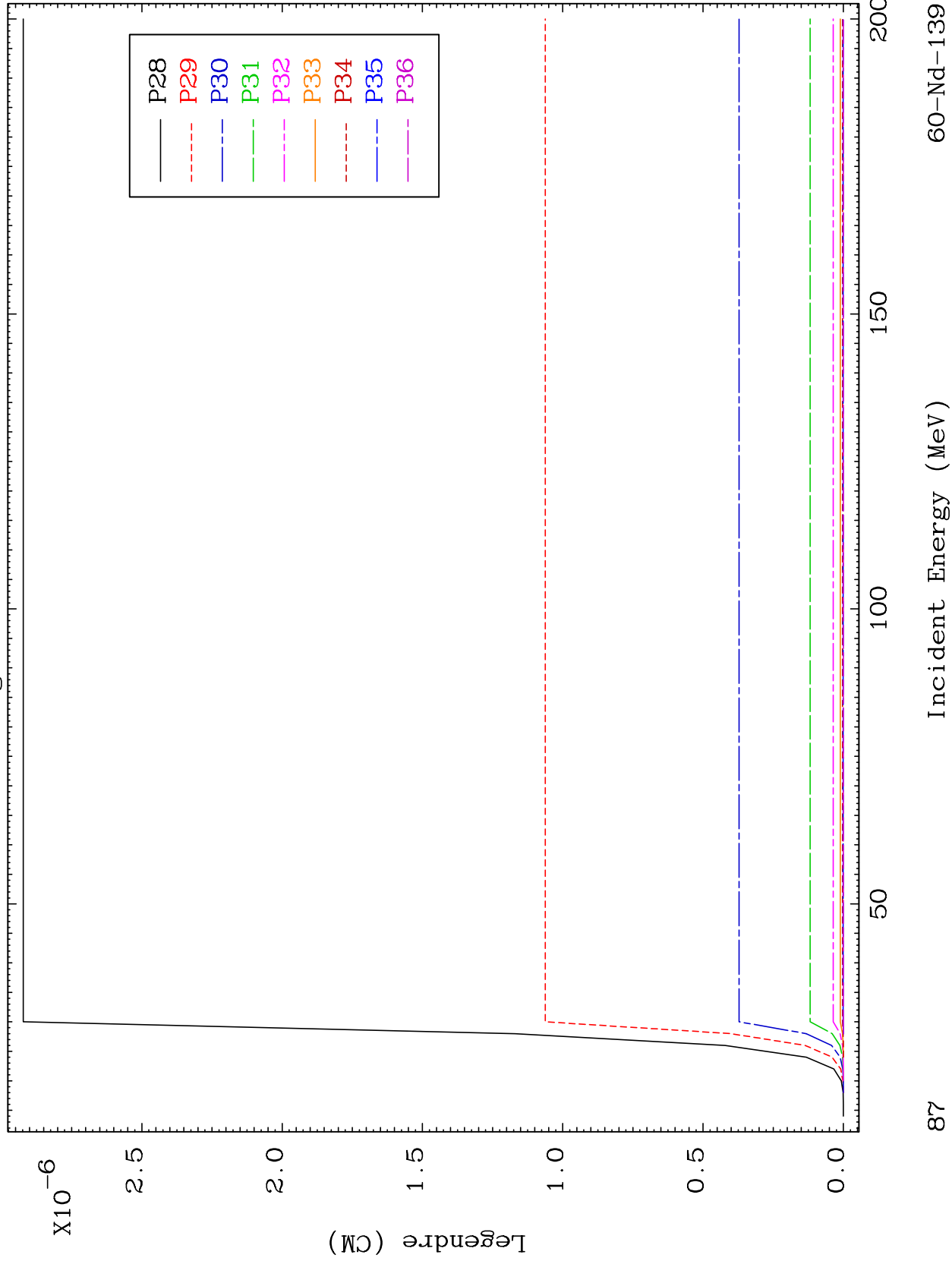




MAT 6016

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

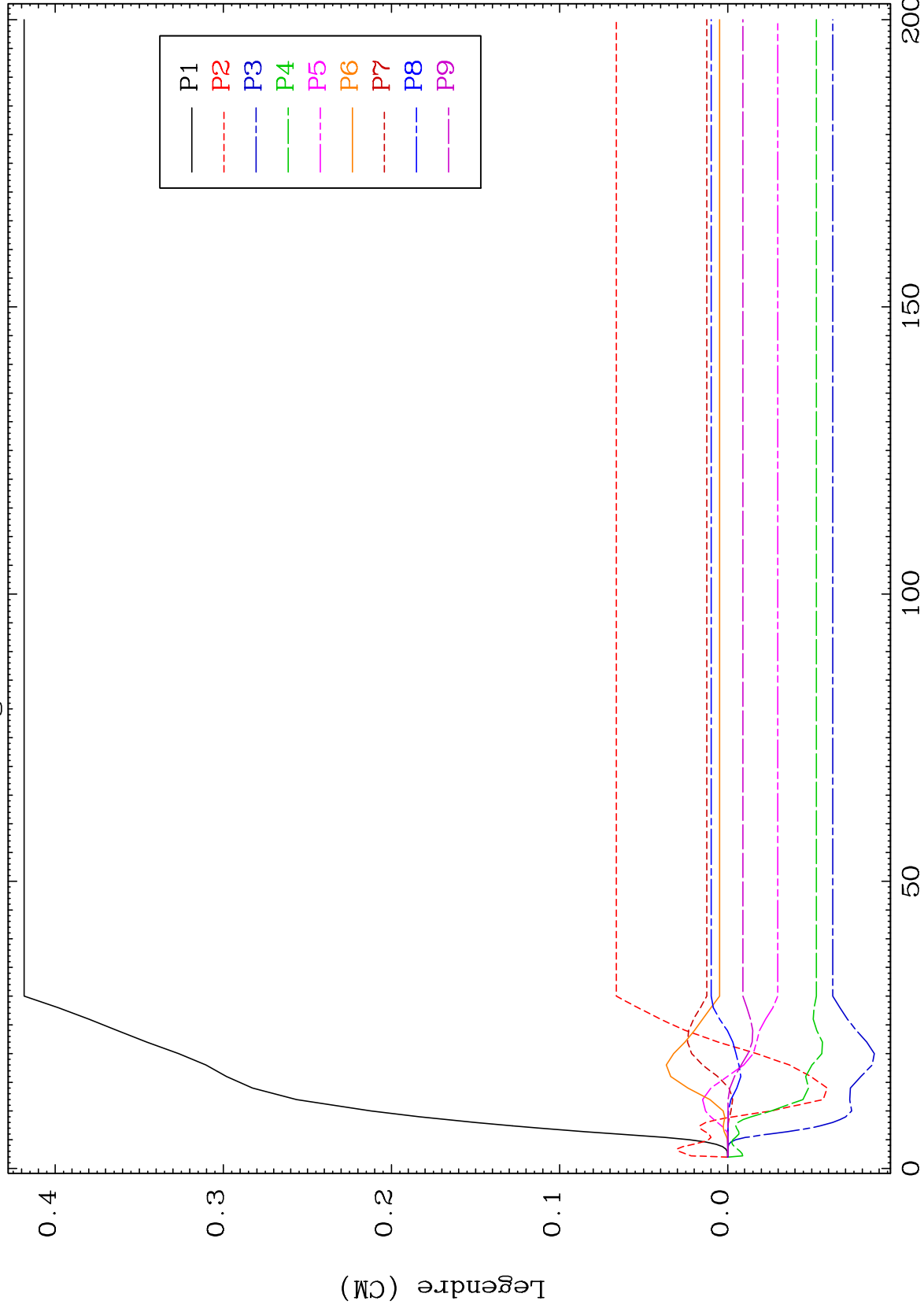
60-Nd-139



MAT 6016

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

60-Nd-139



60-Nd-139

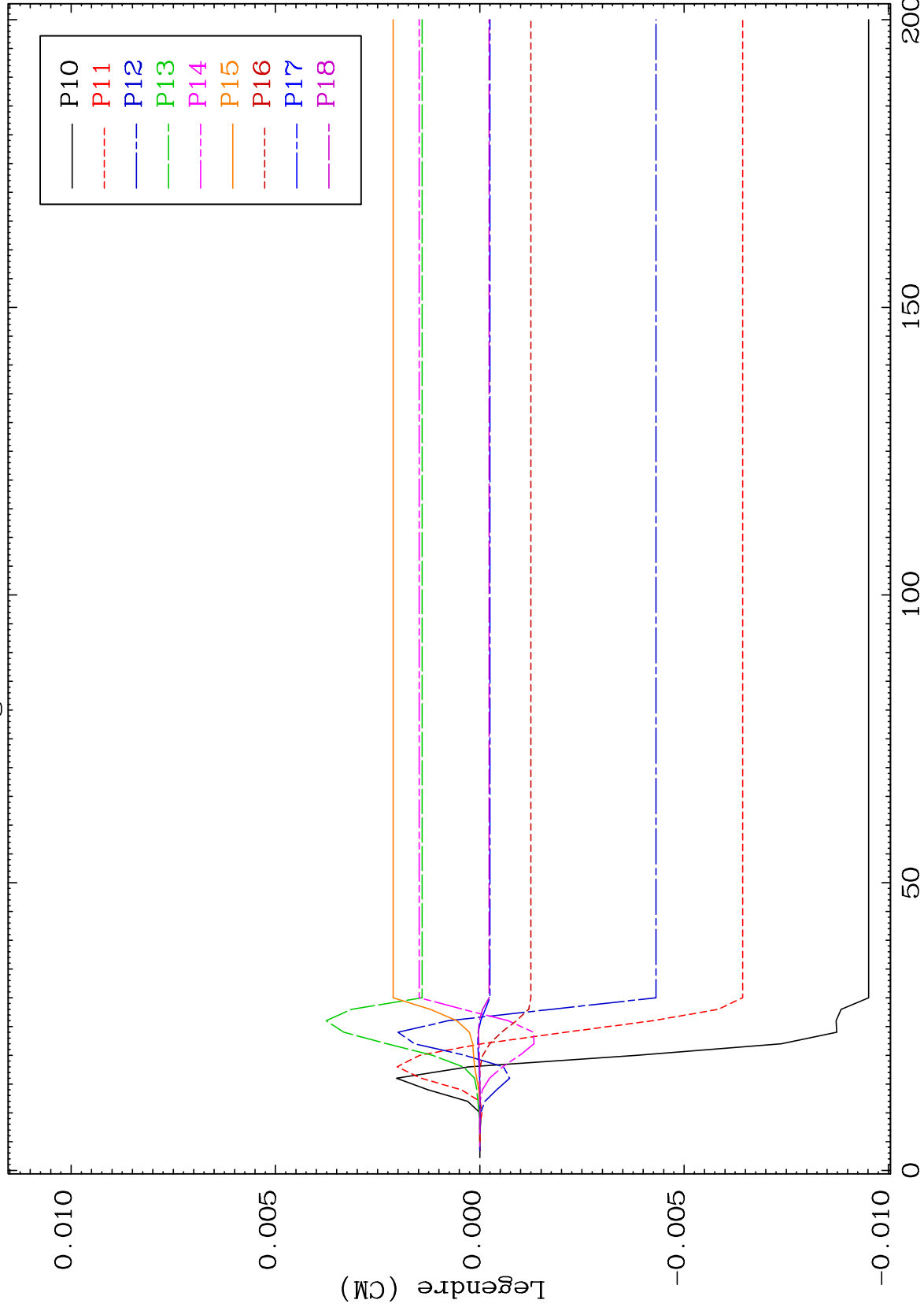
Incident Energy (MeV)

88

MAT 6016

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

60-Nd-139



89

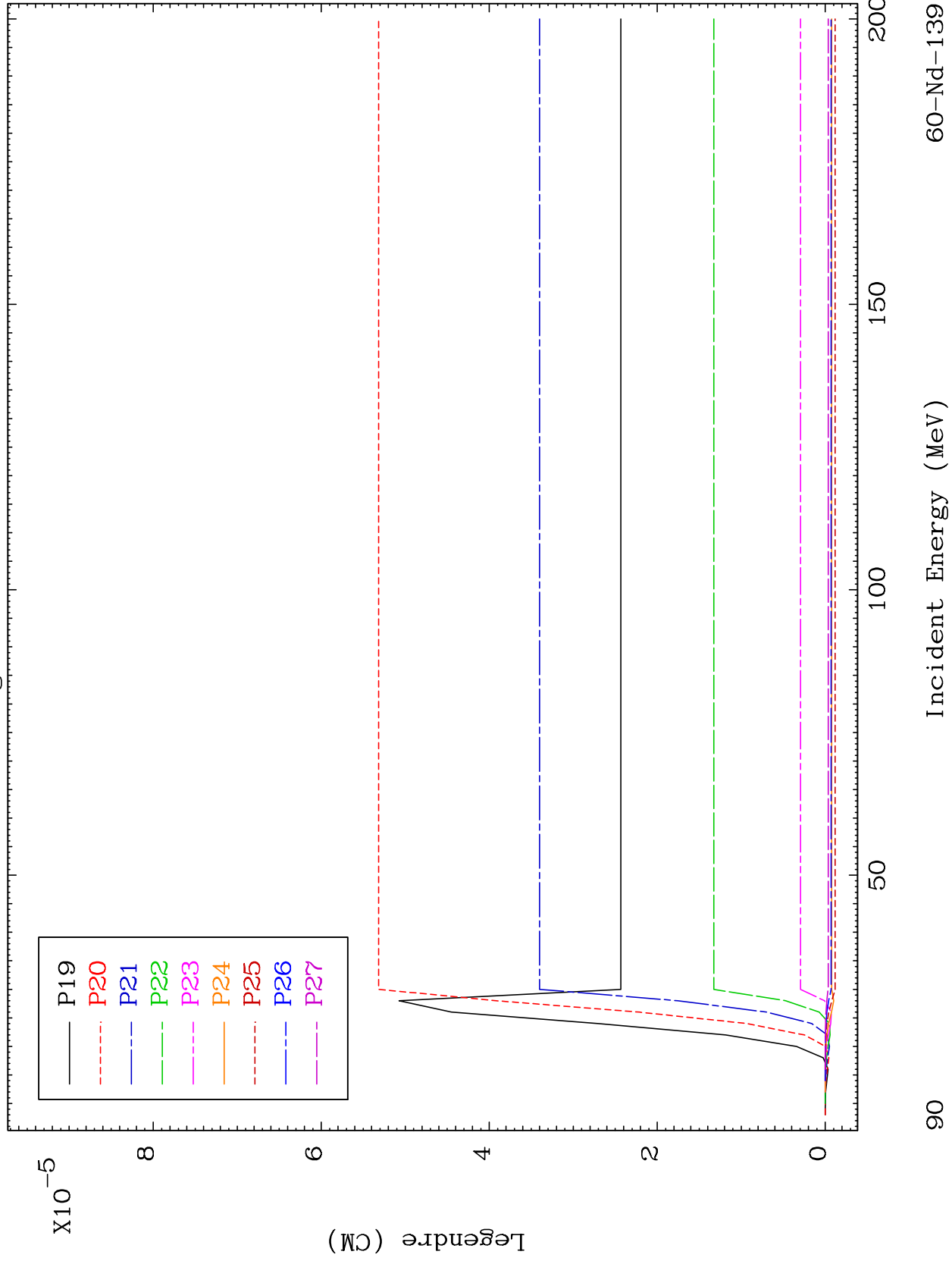
Incident Energy (MeV)

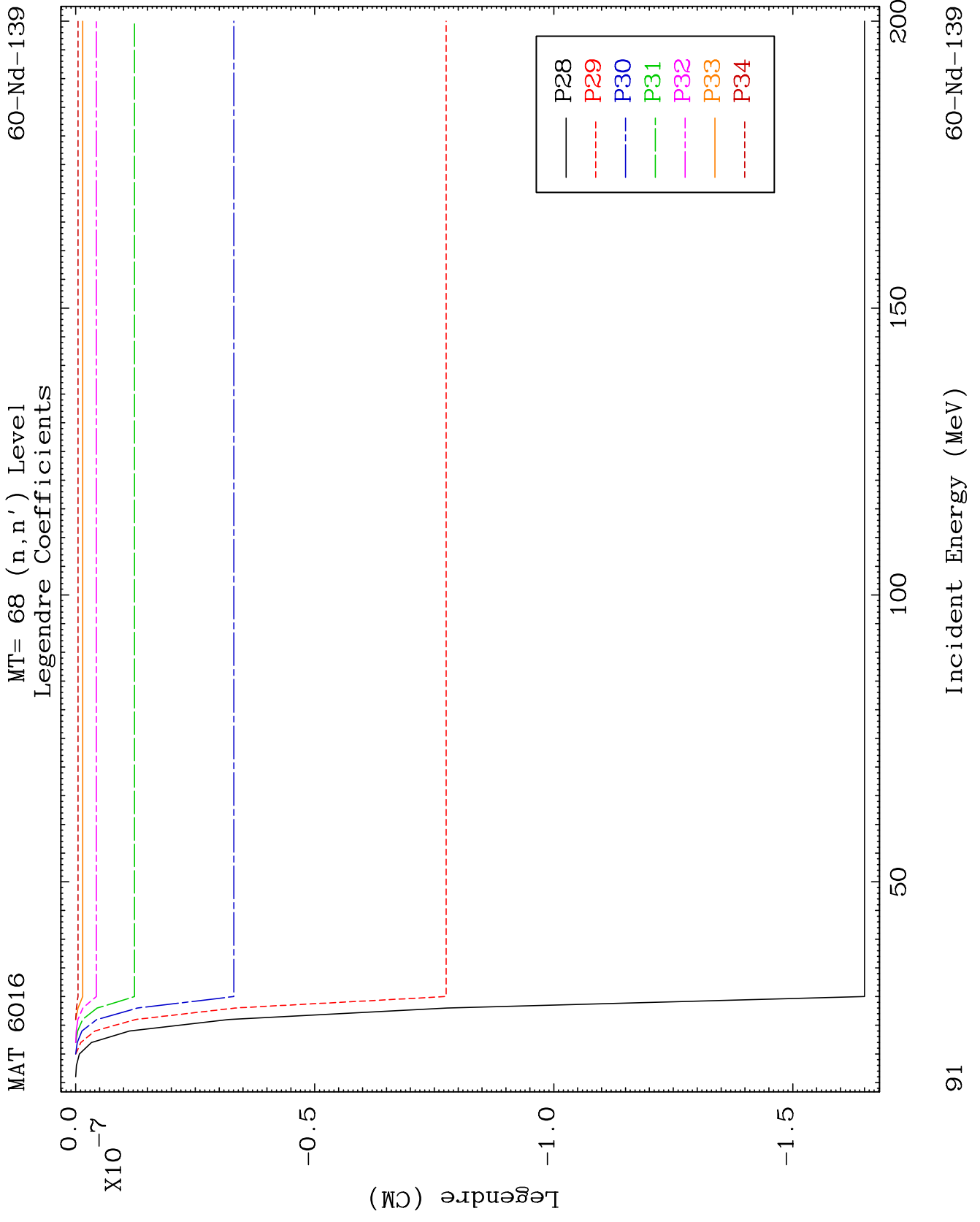
60-Nd-139

MAT 6016

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

60-Nd-139

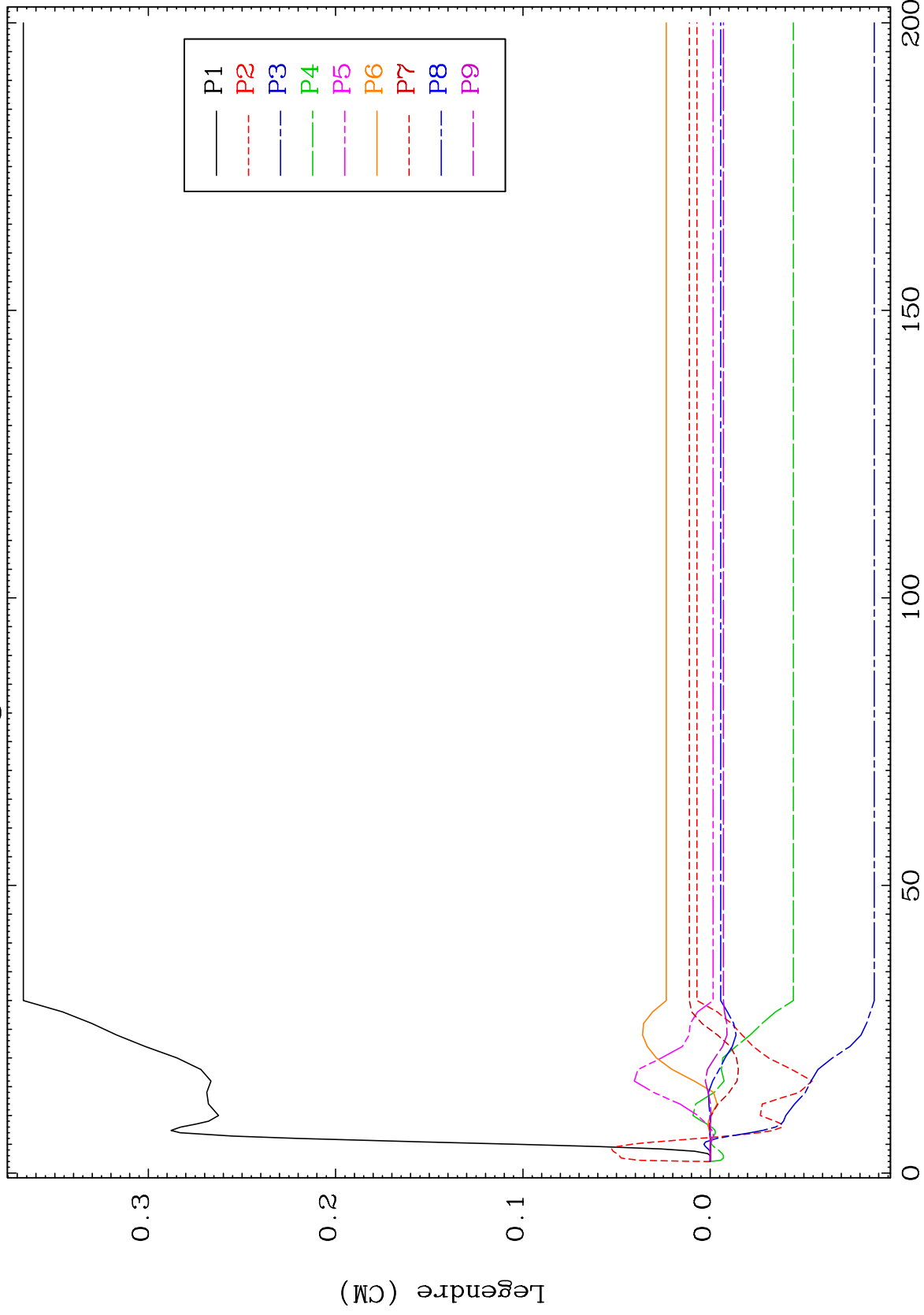




MAT 6016

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

60-Nd-139



92

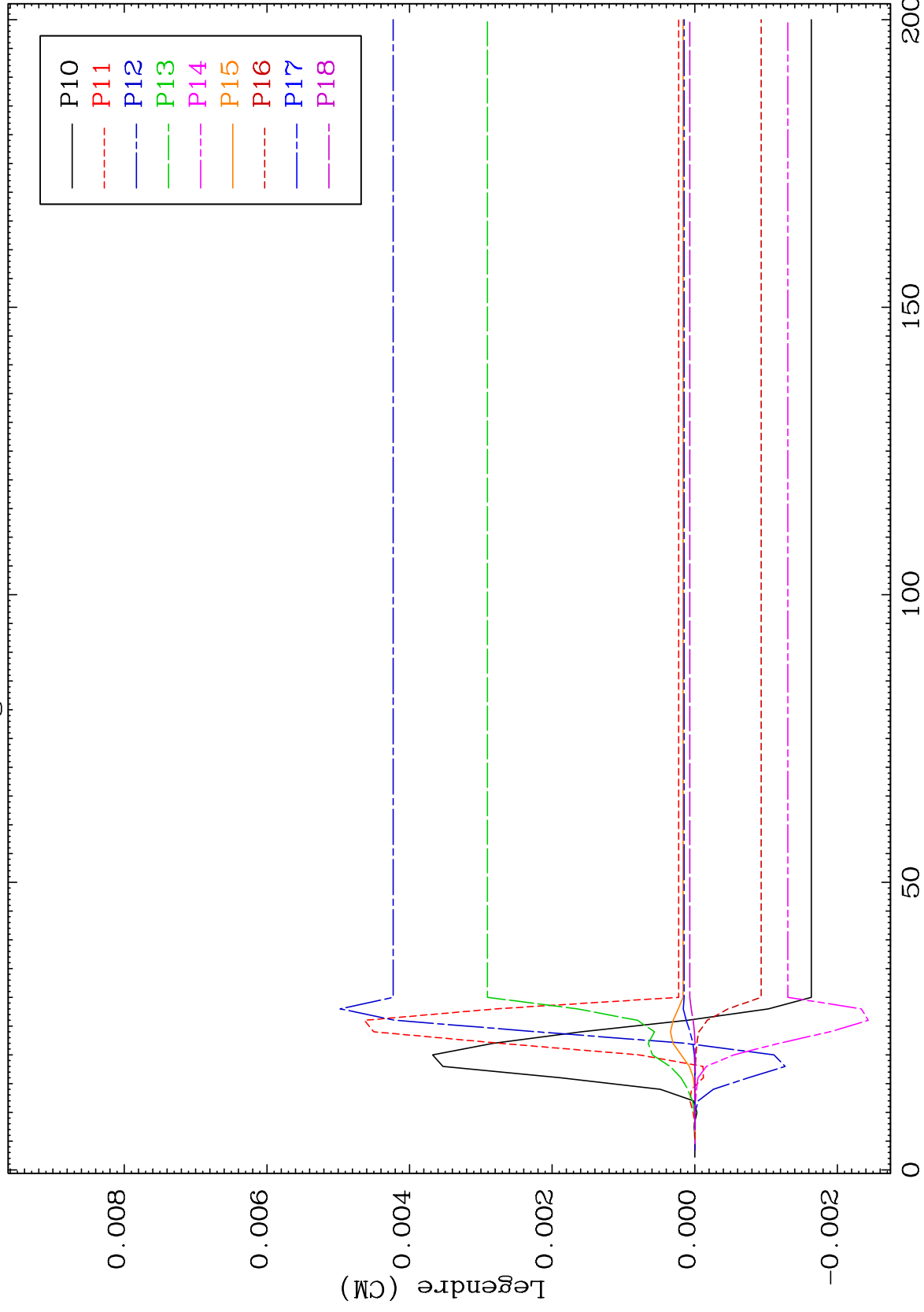
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



93

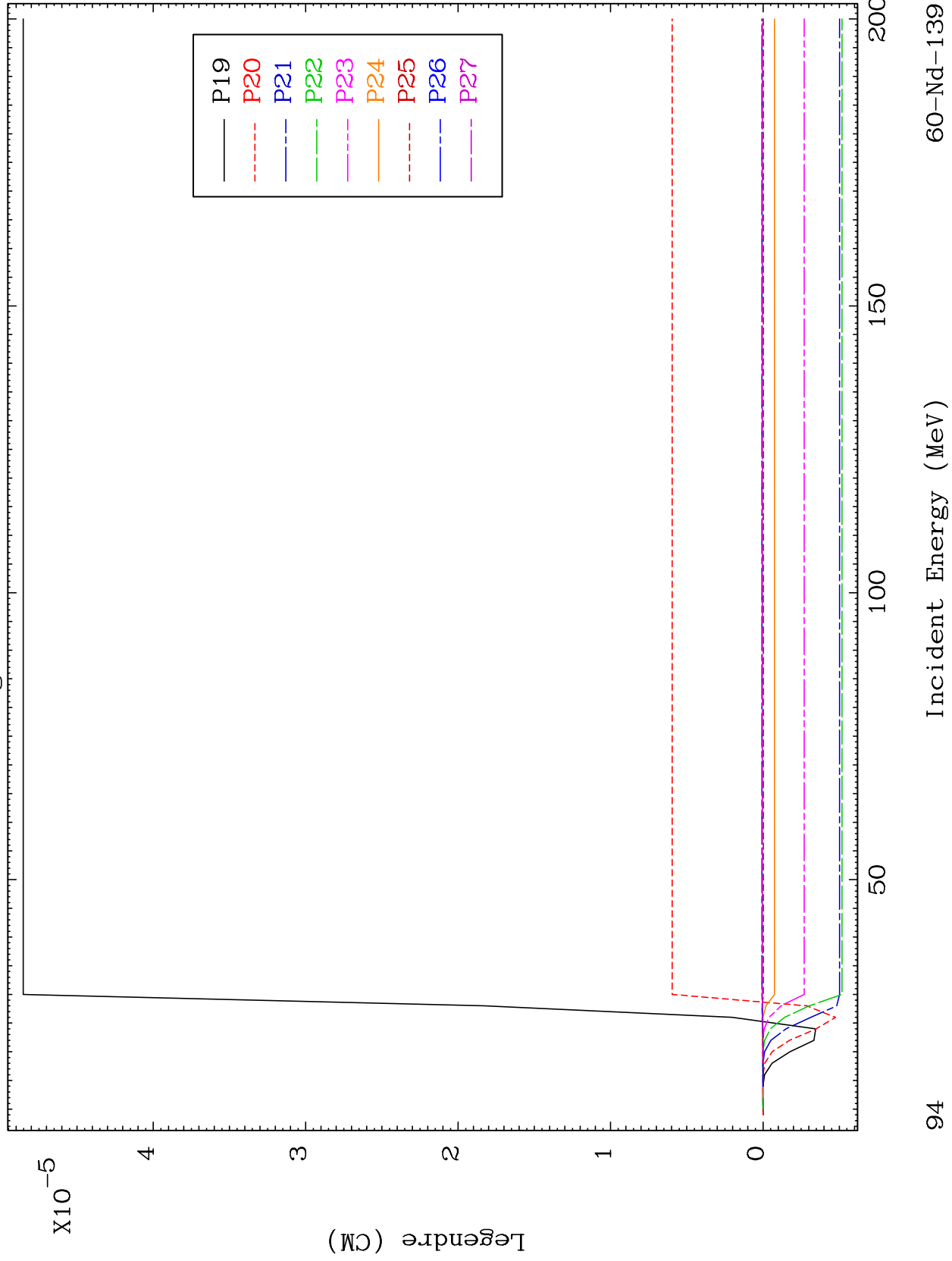
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

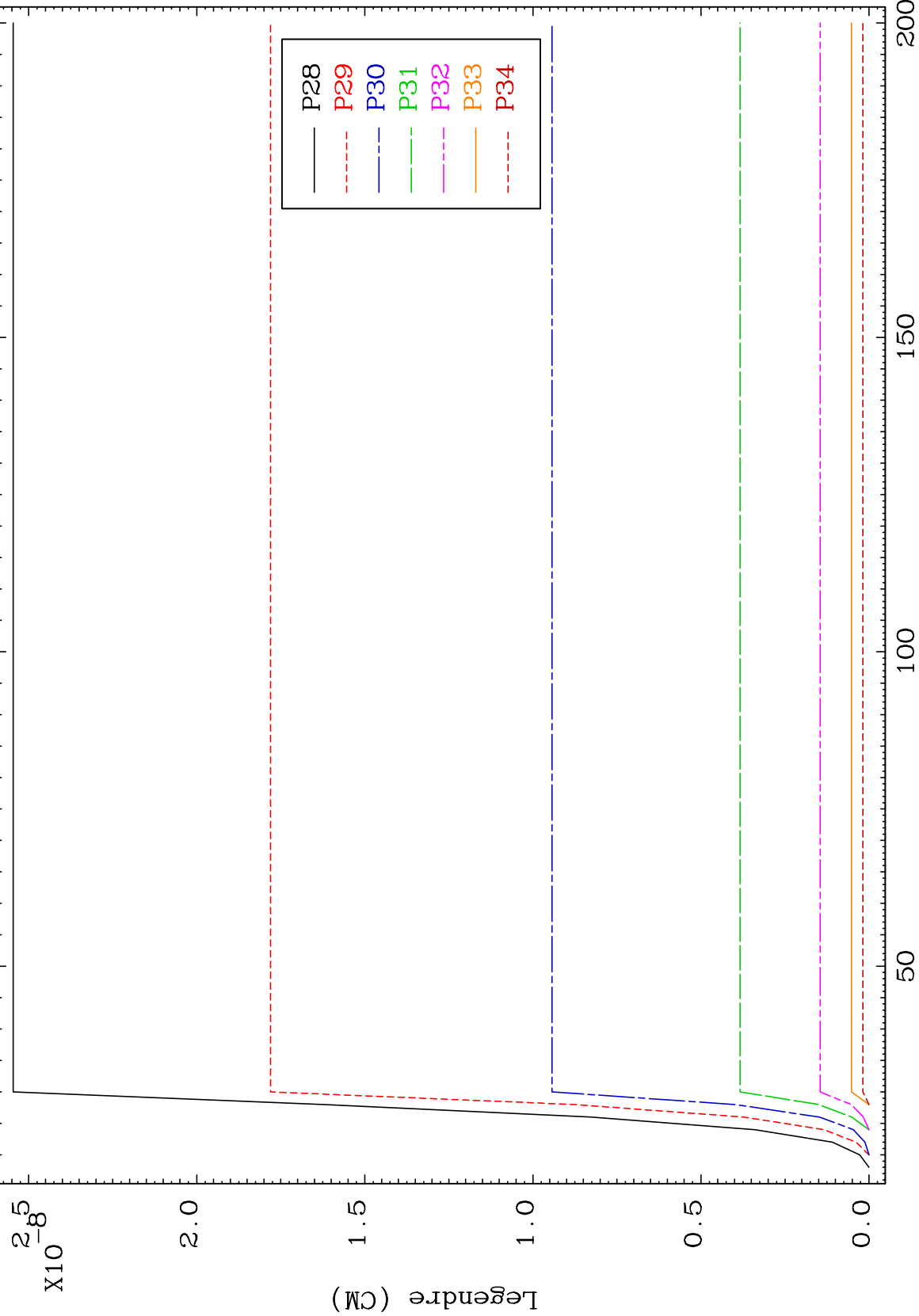
60-Nd-139



MAT 6016

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

60-Nd-139



95

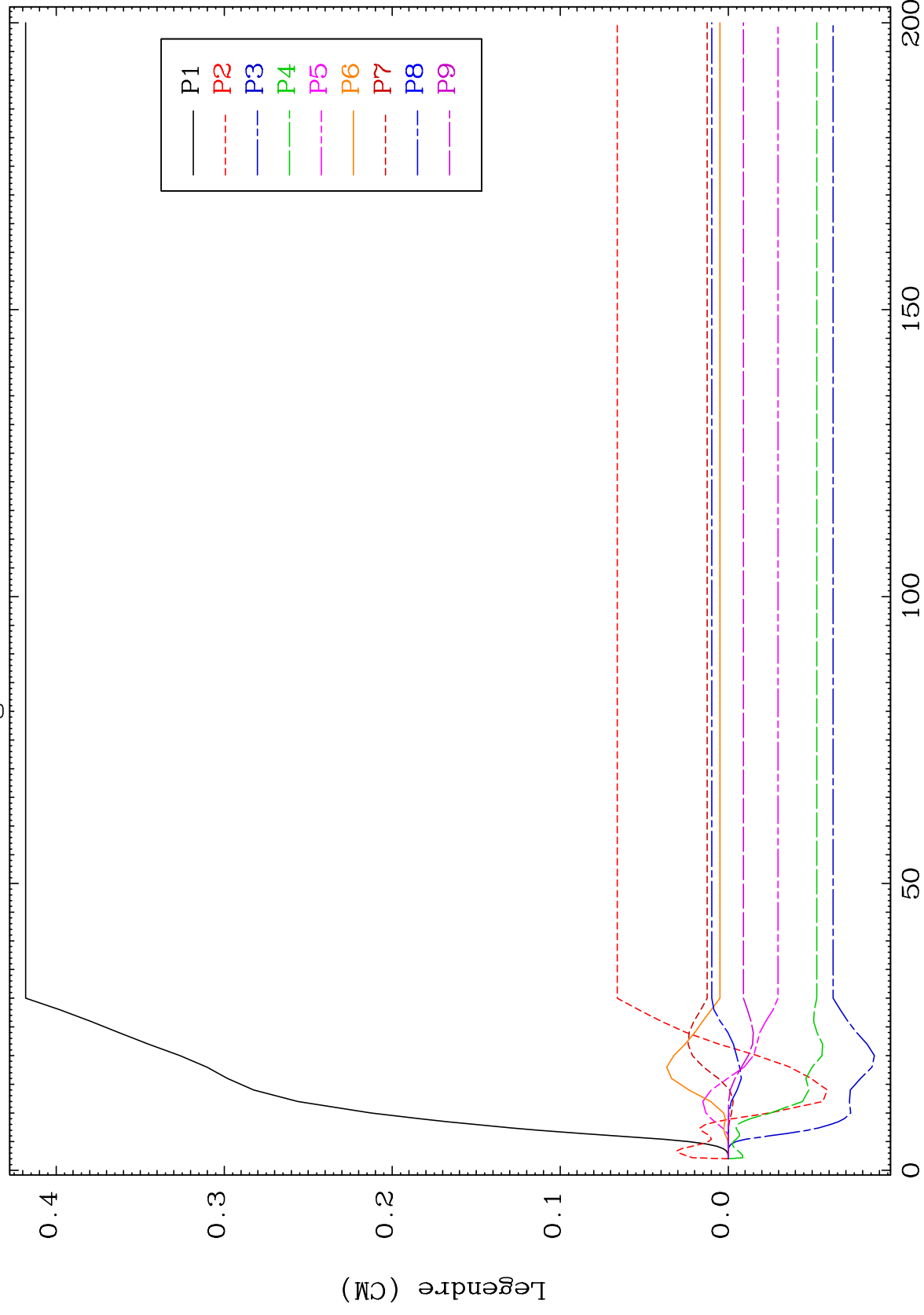
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



96

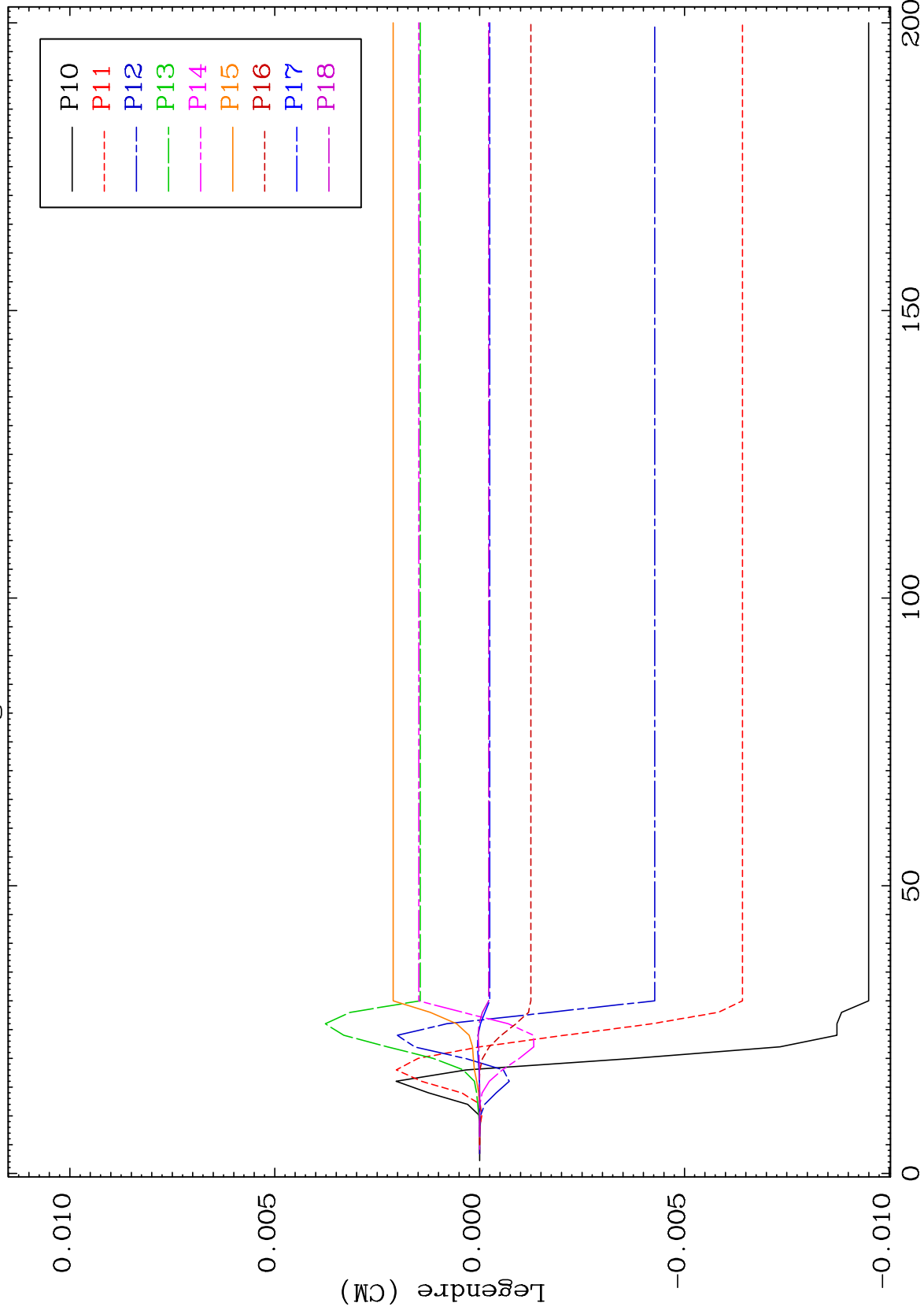
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



97

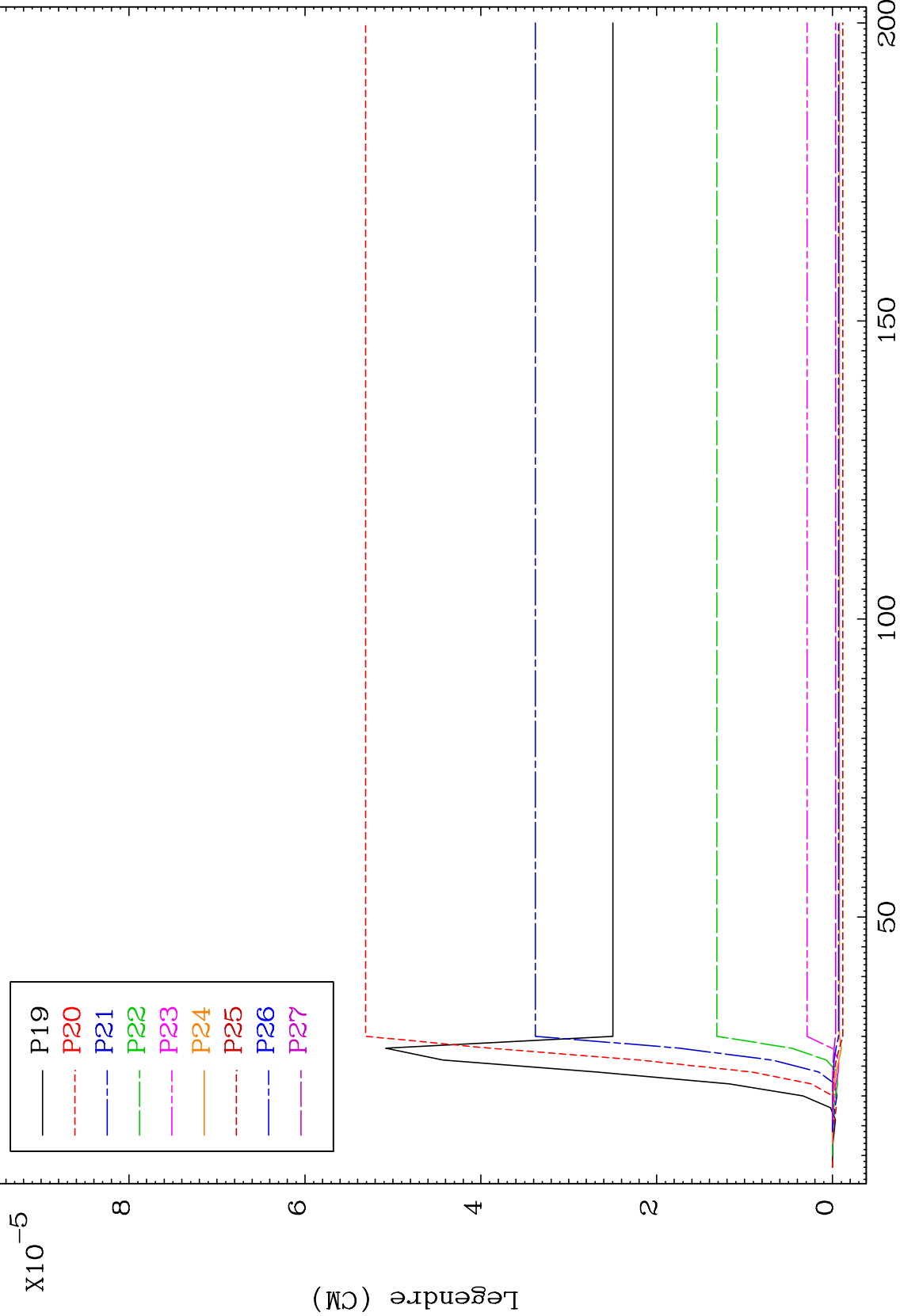
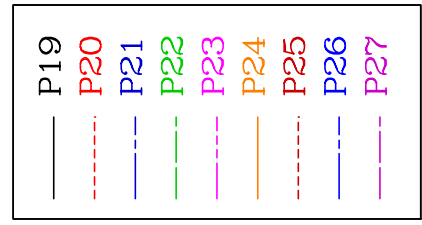
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

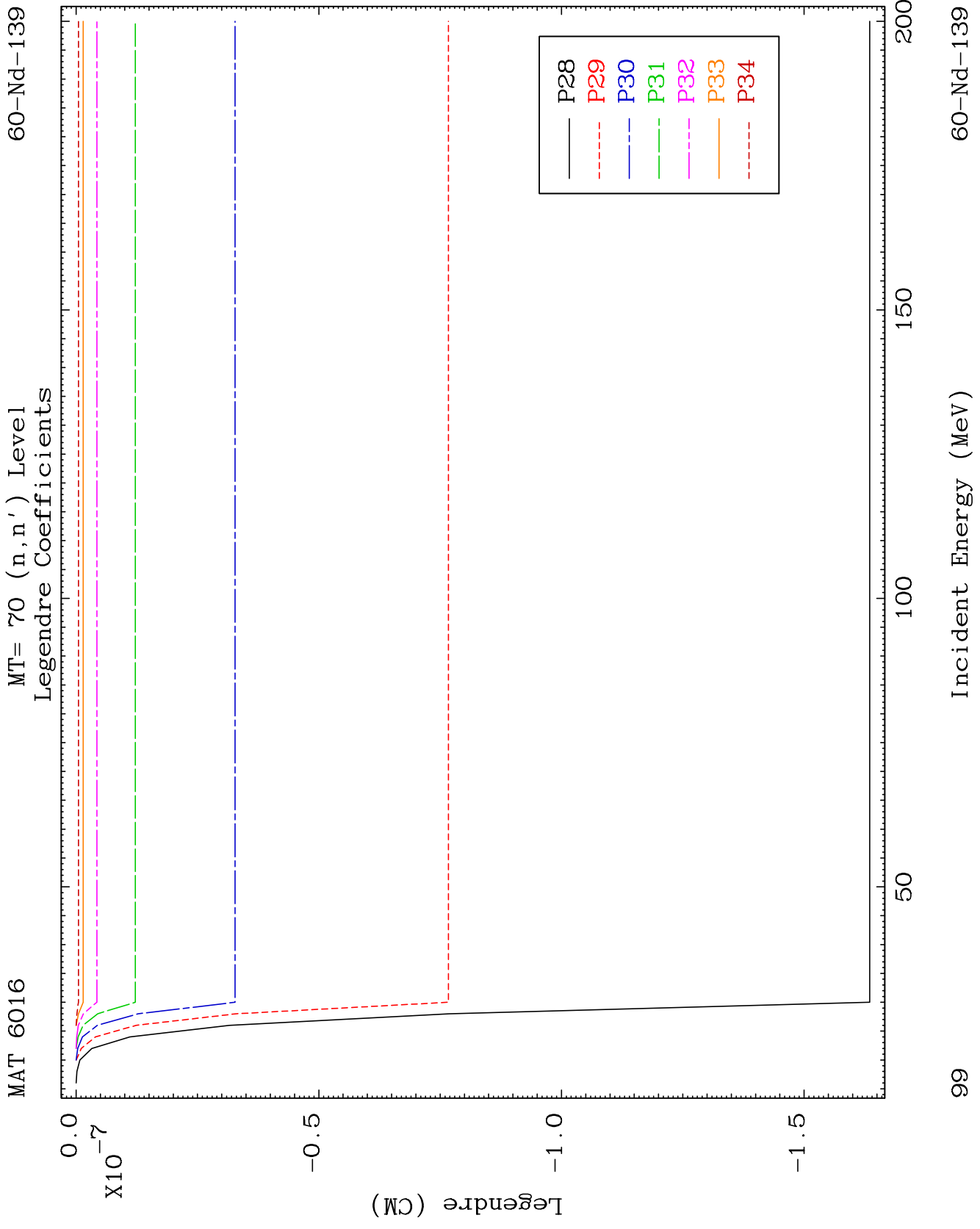
60-Nd-139

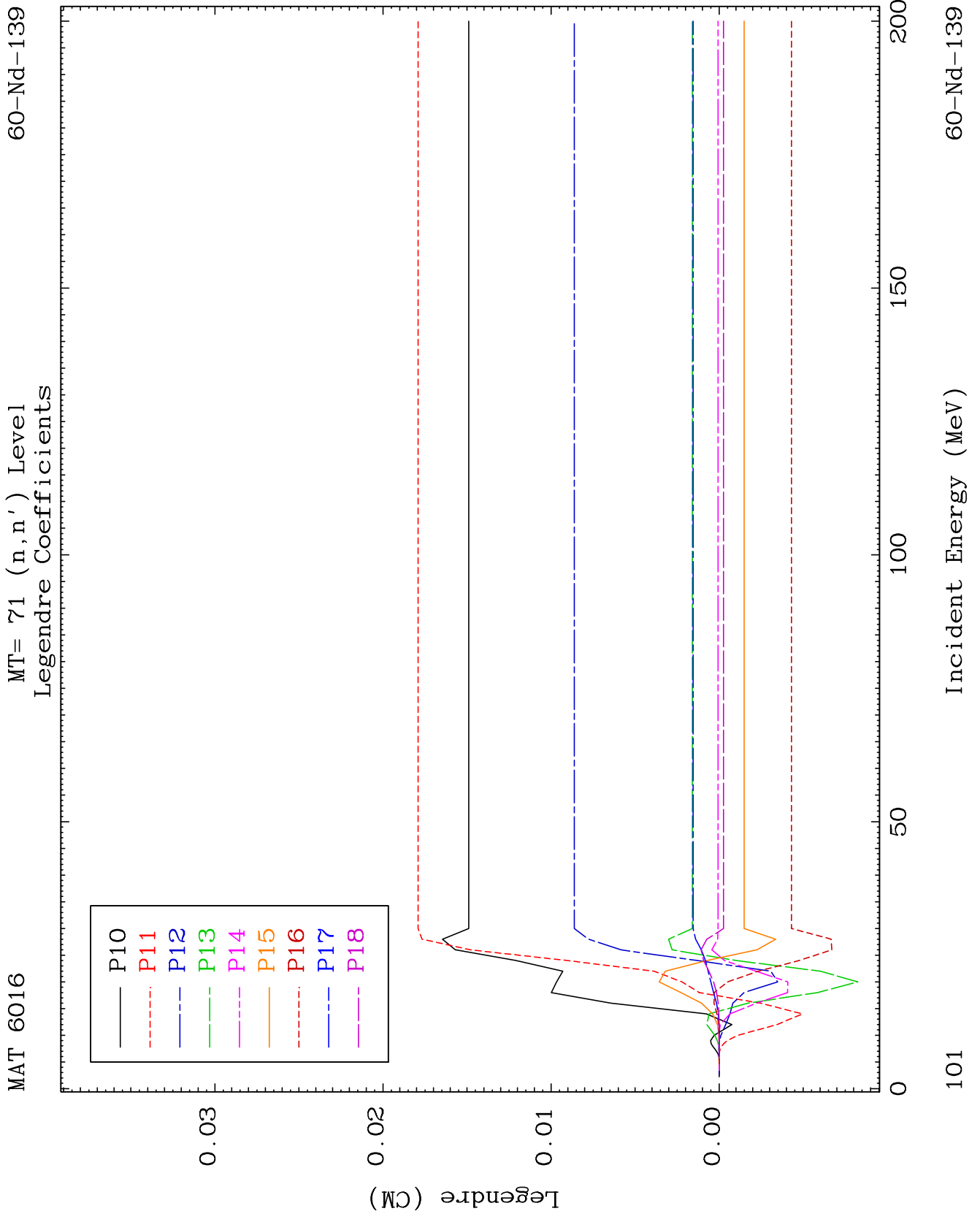


98

Incident Energy (MeV)

60-Nd-139

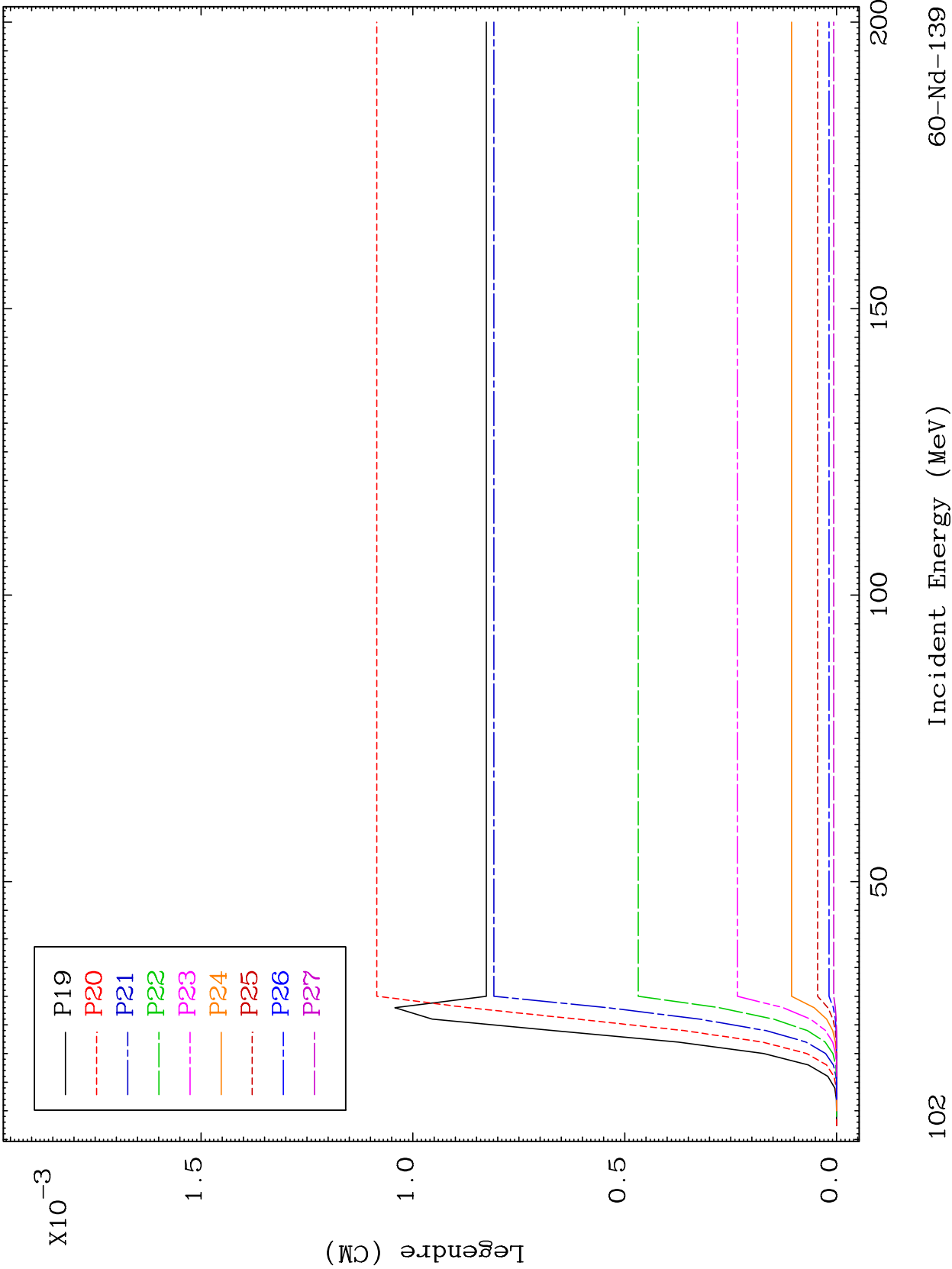




MAT 6016

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

60-Nd-139

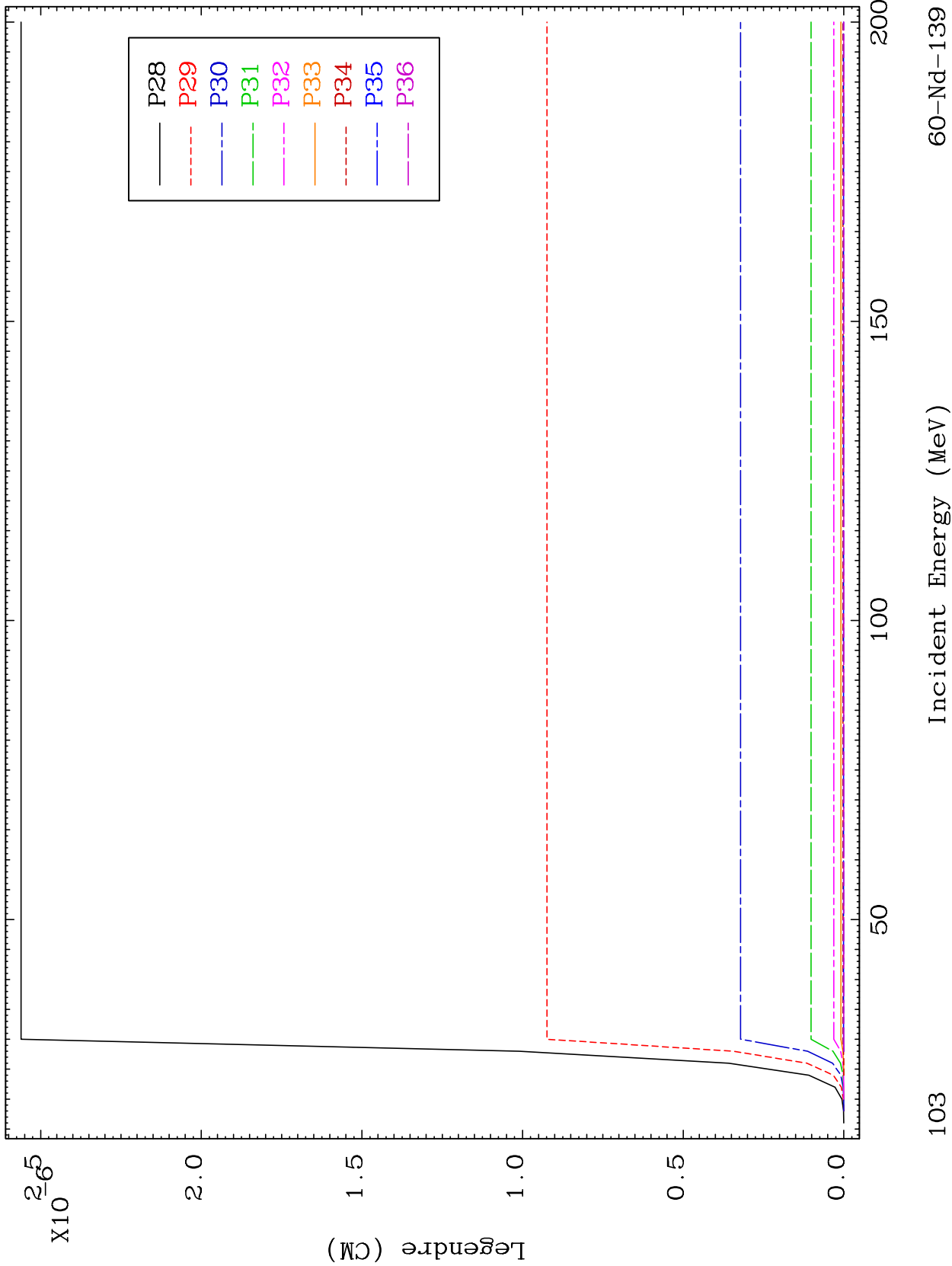


102

MAT 6016

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

60-Nd-139

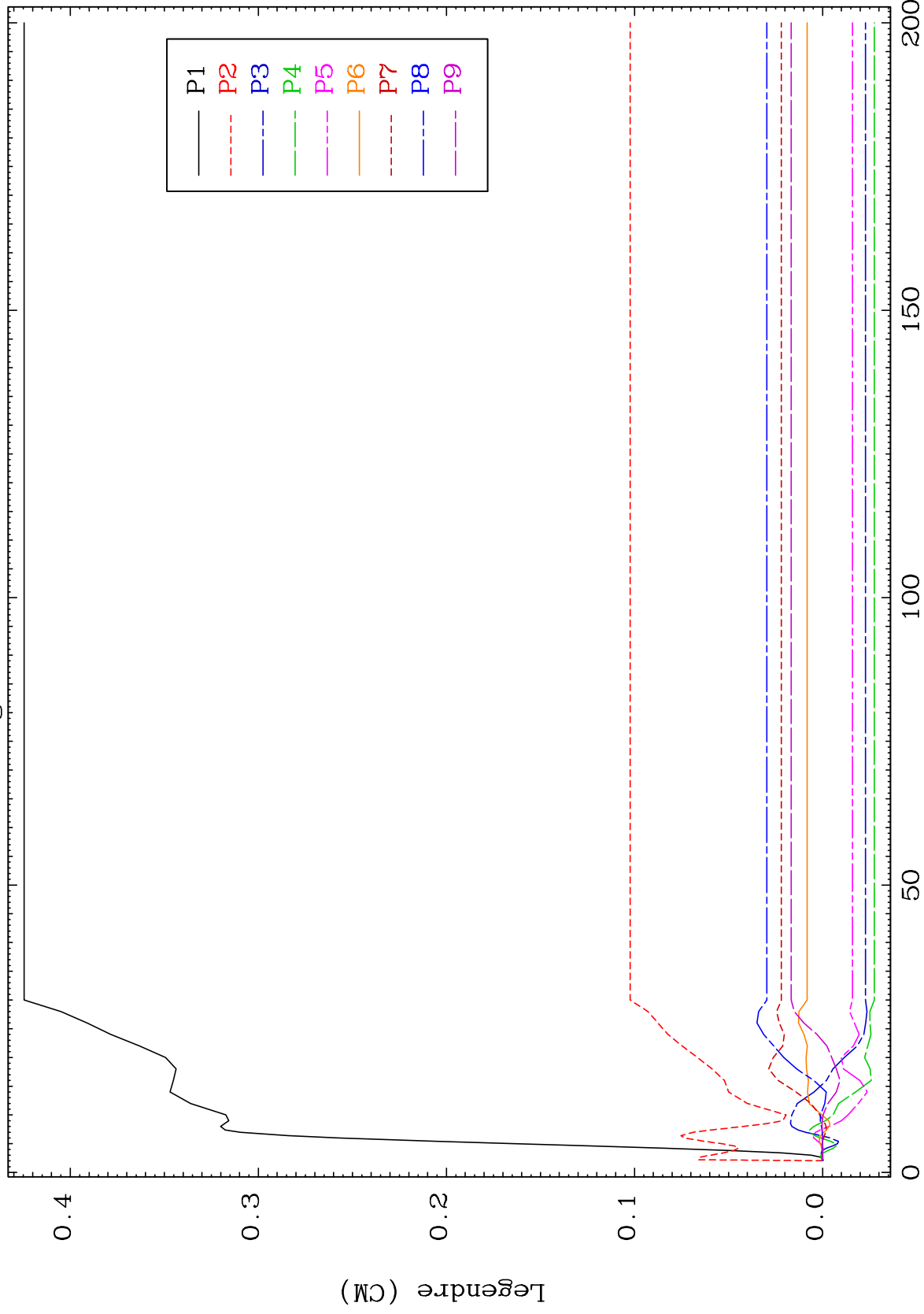


103

MAT 6016

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

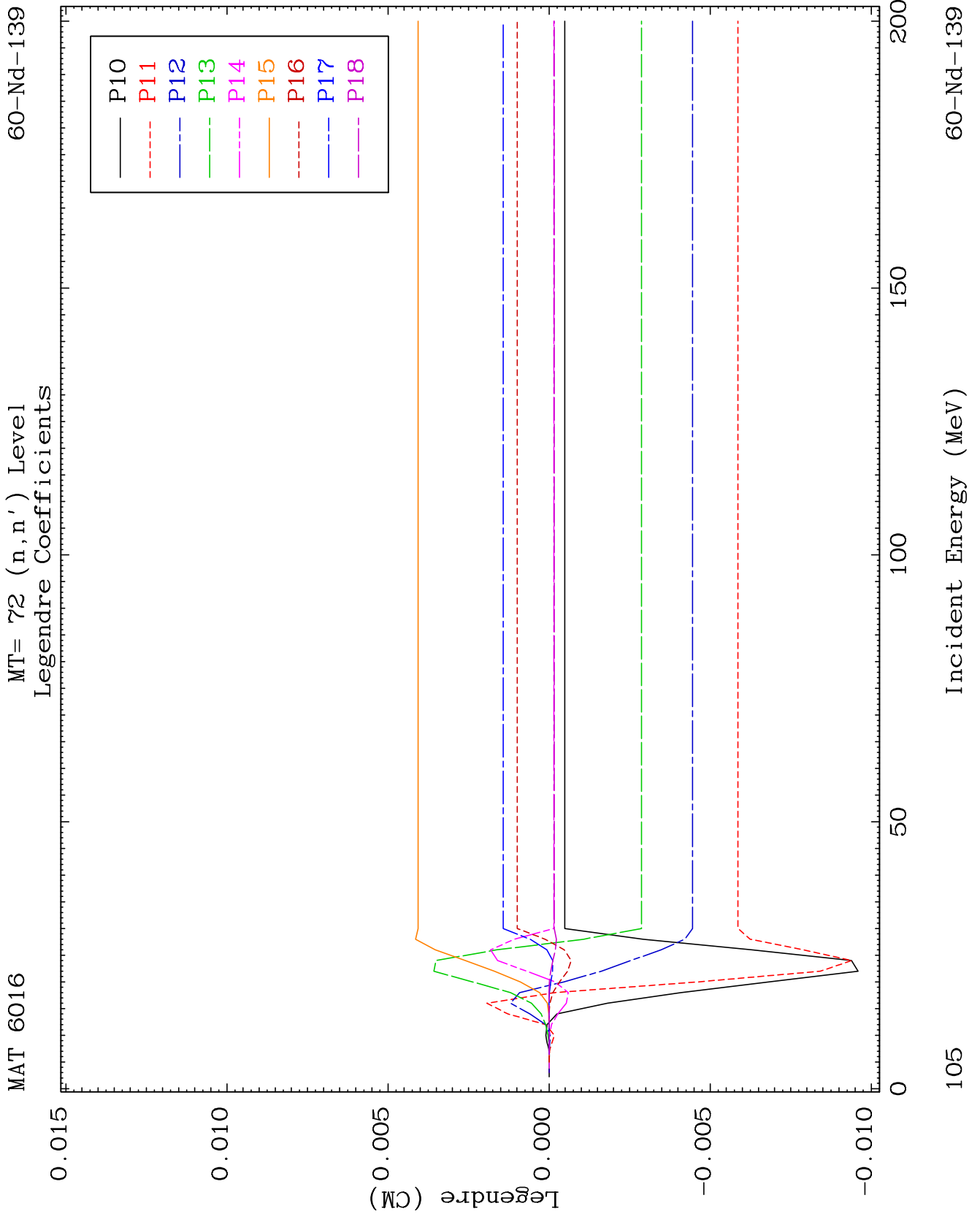
60-Nd-139

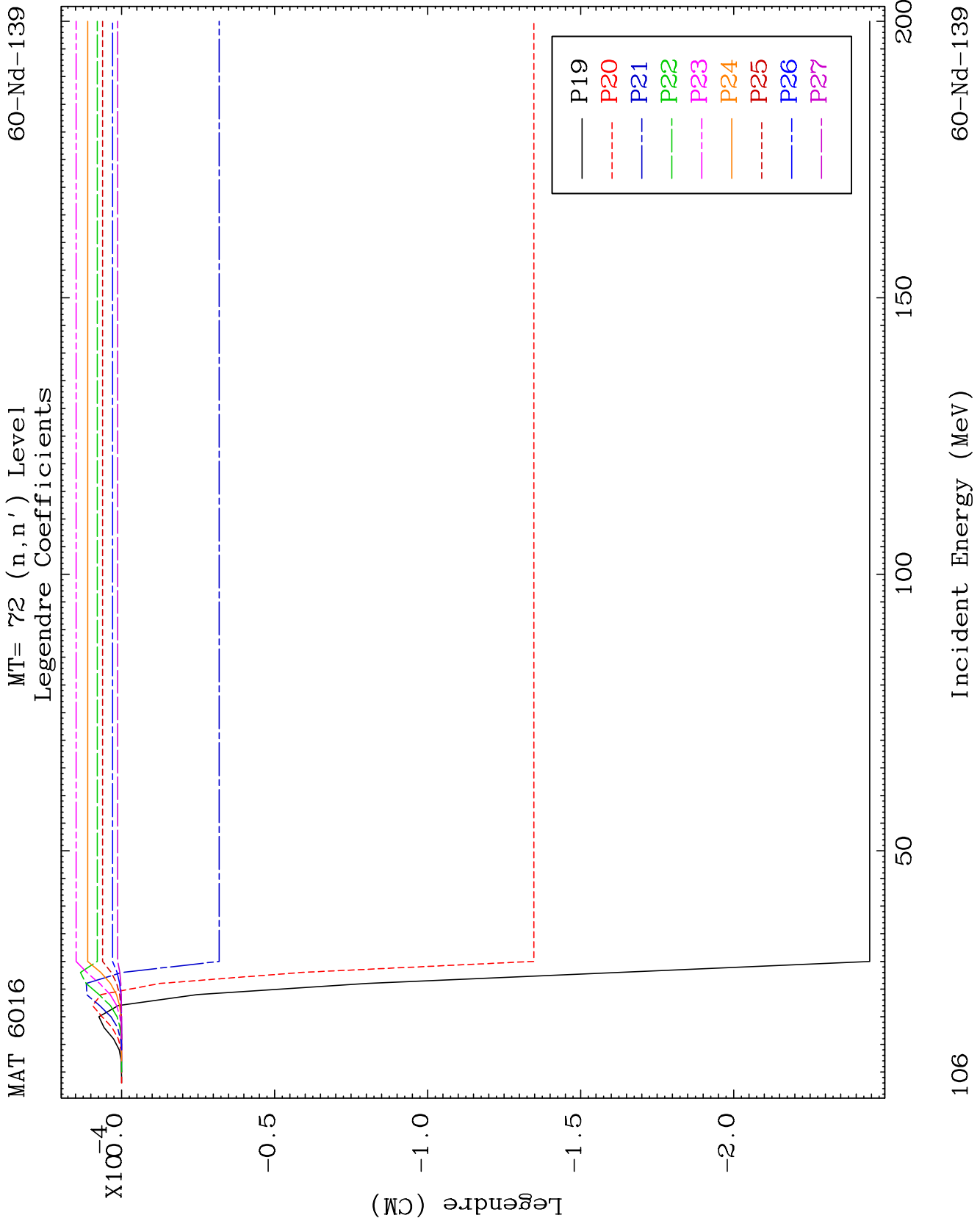


104

Incident Energy (MeV)

60-Nd-139

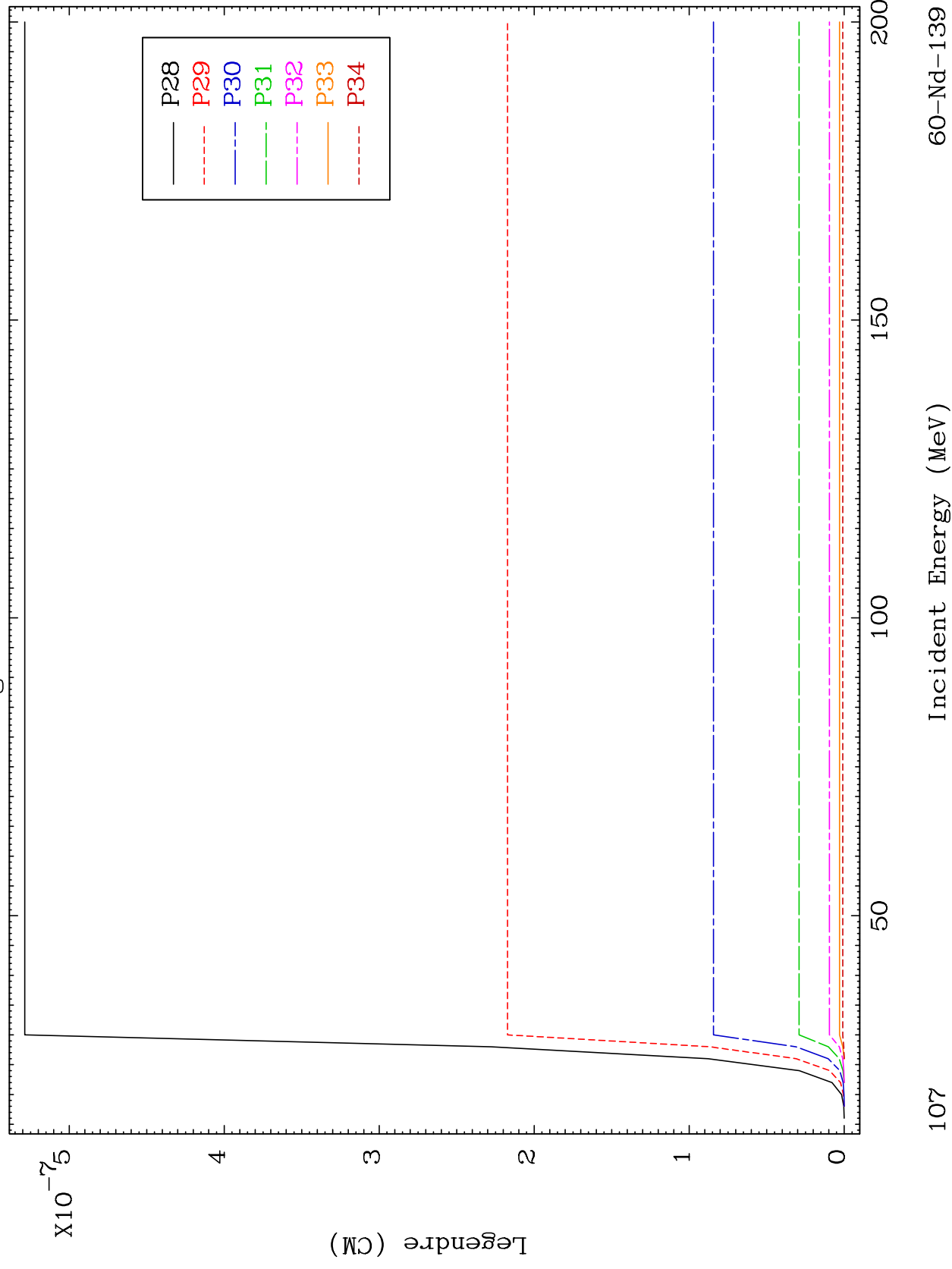




MAT 6016

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

60-Nd-139

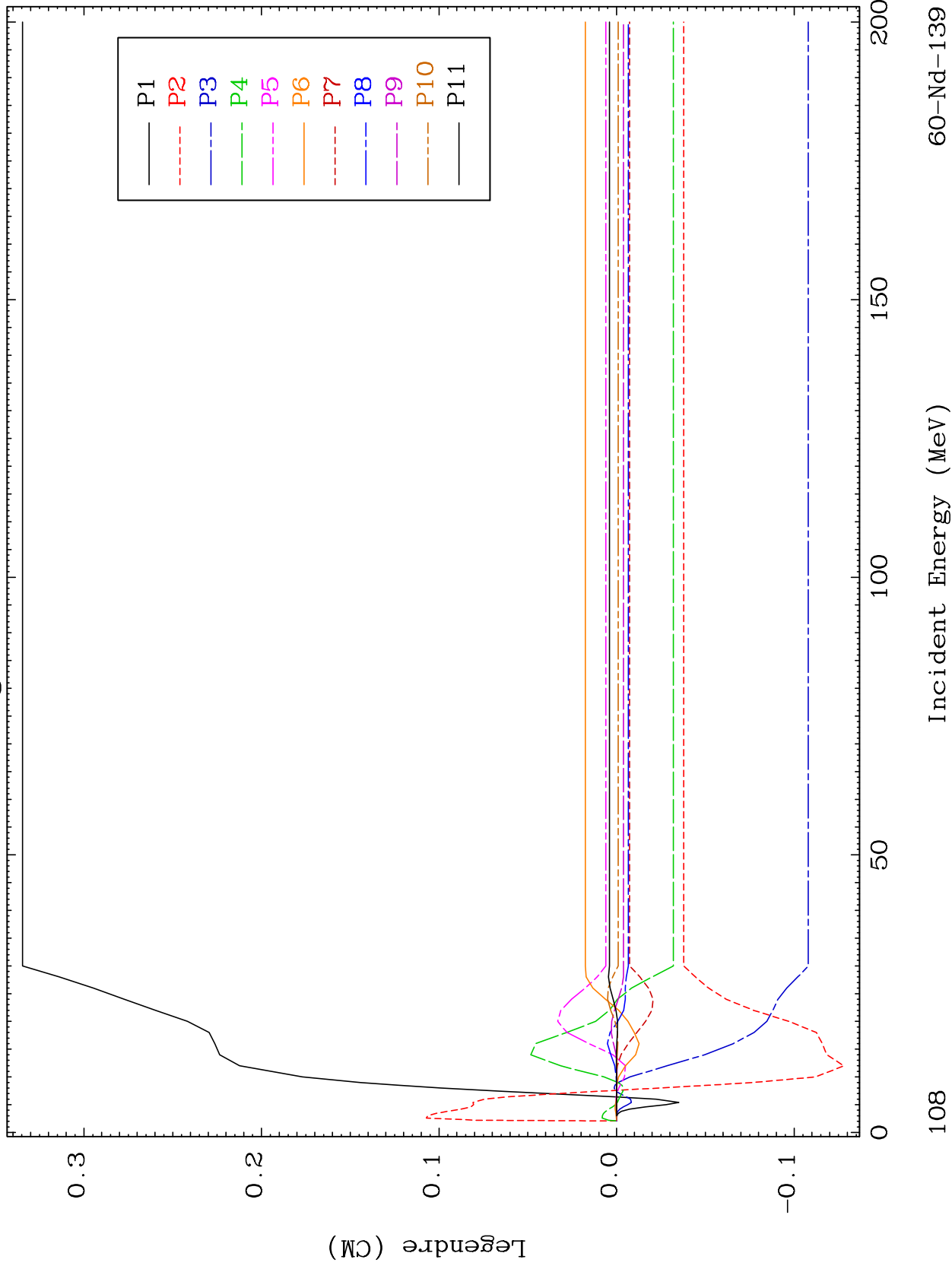


107

MAT 6016

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

60-Nd-139



60-Nd-139

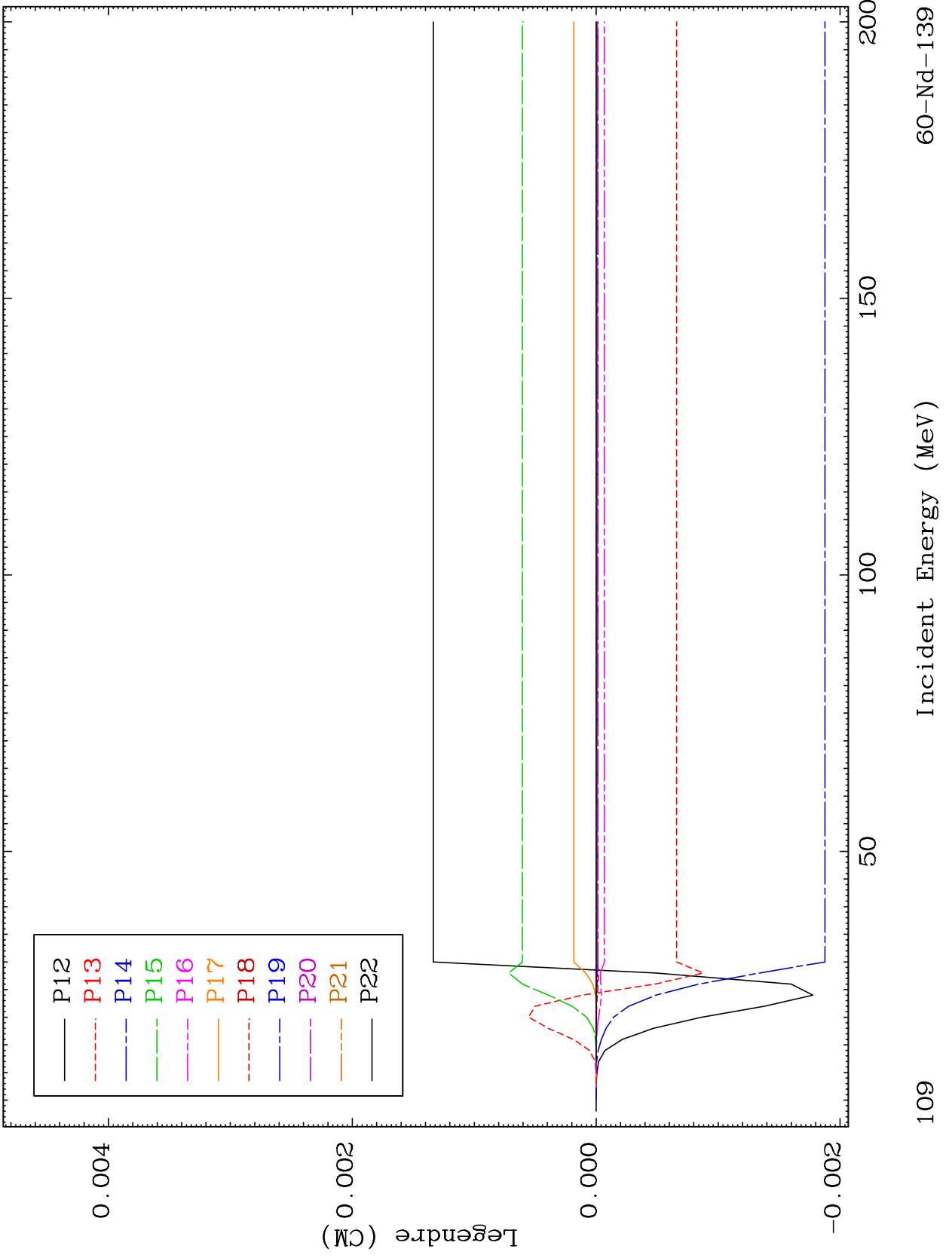
Incident Energy (MeV)

108

MAT 6016

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

60-Nd-139



109

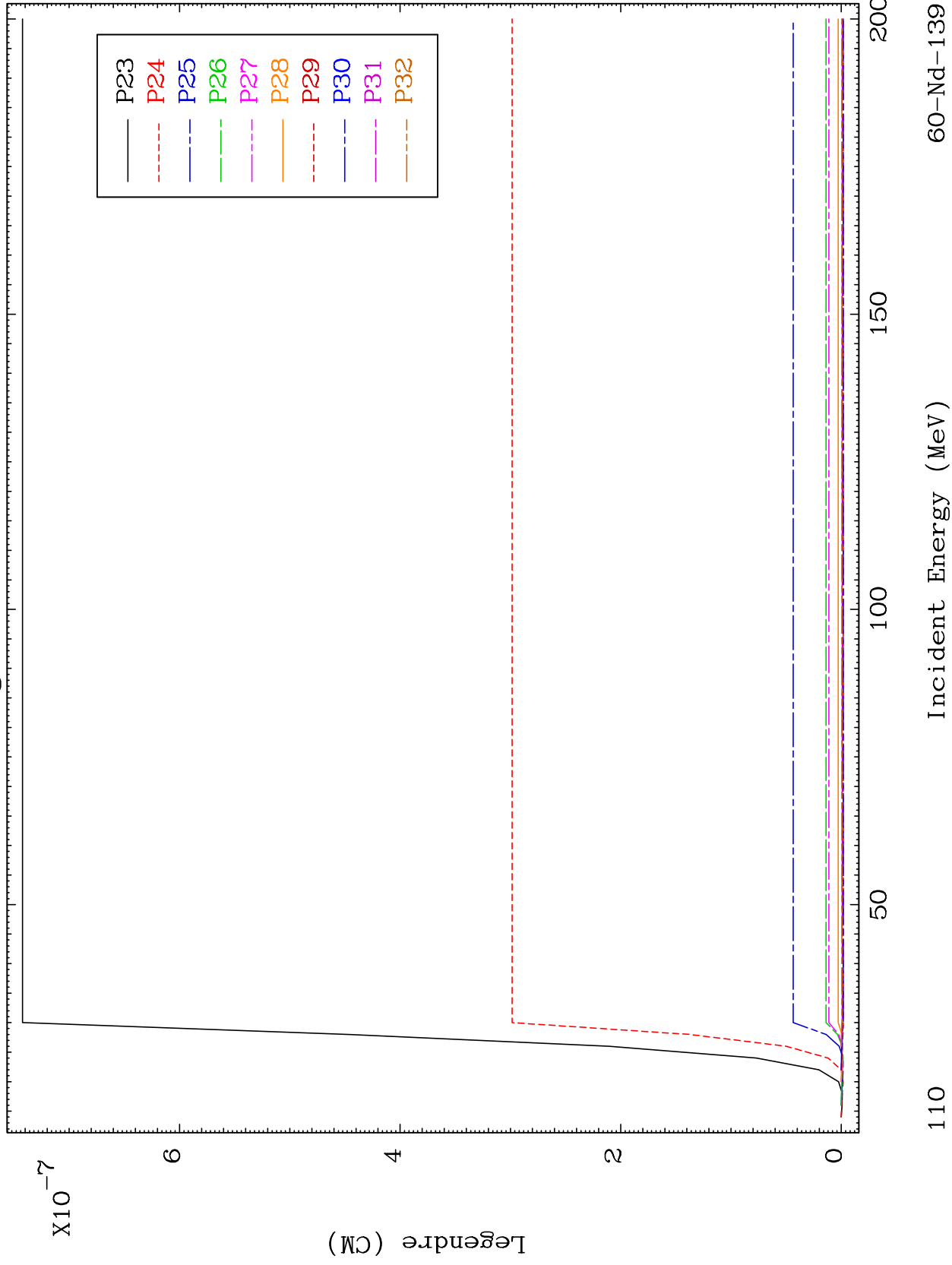
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



60-Nd-139

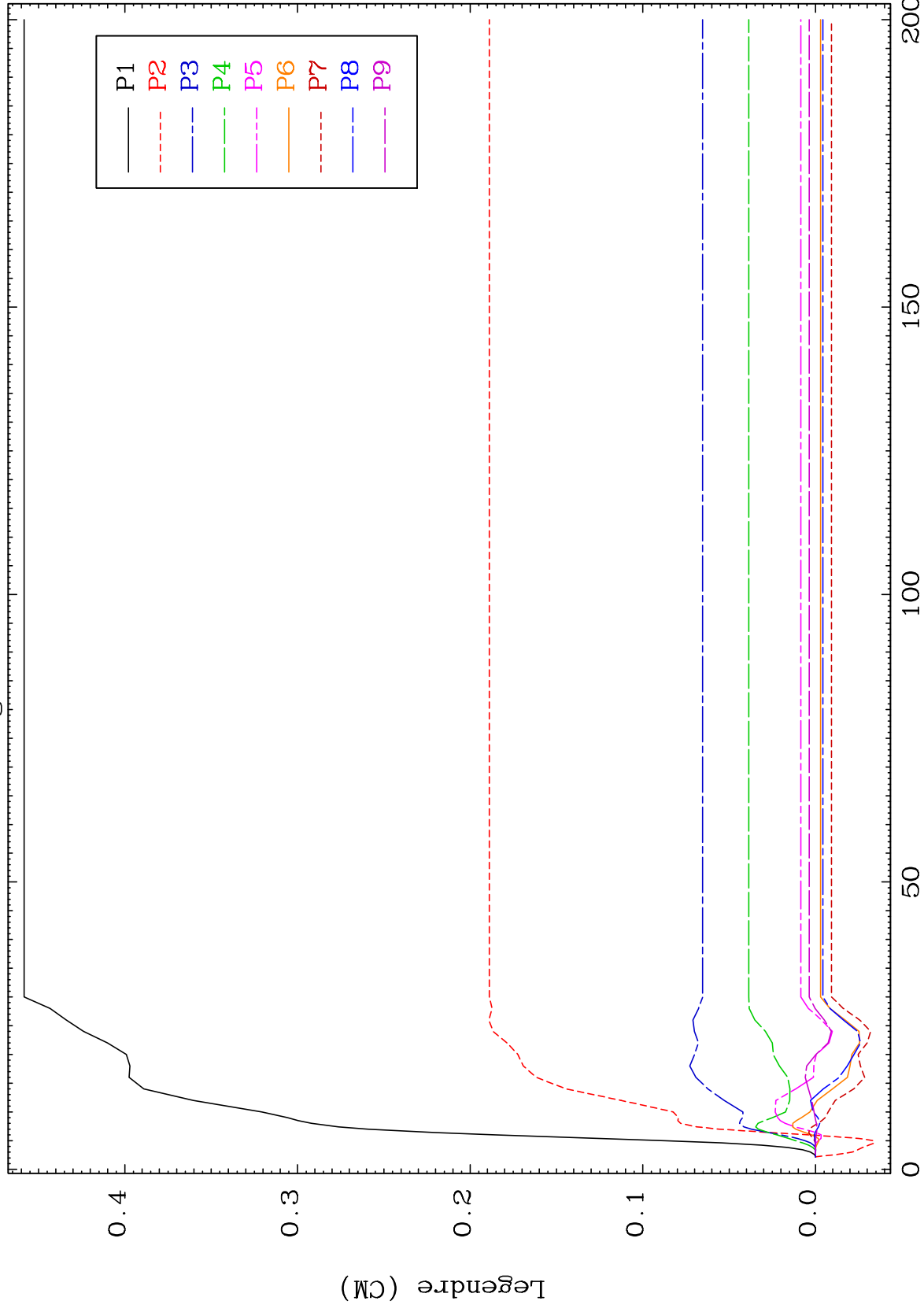
Incident Energy (MeV)

110

MAT 6016

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

60-Nd-139



111

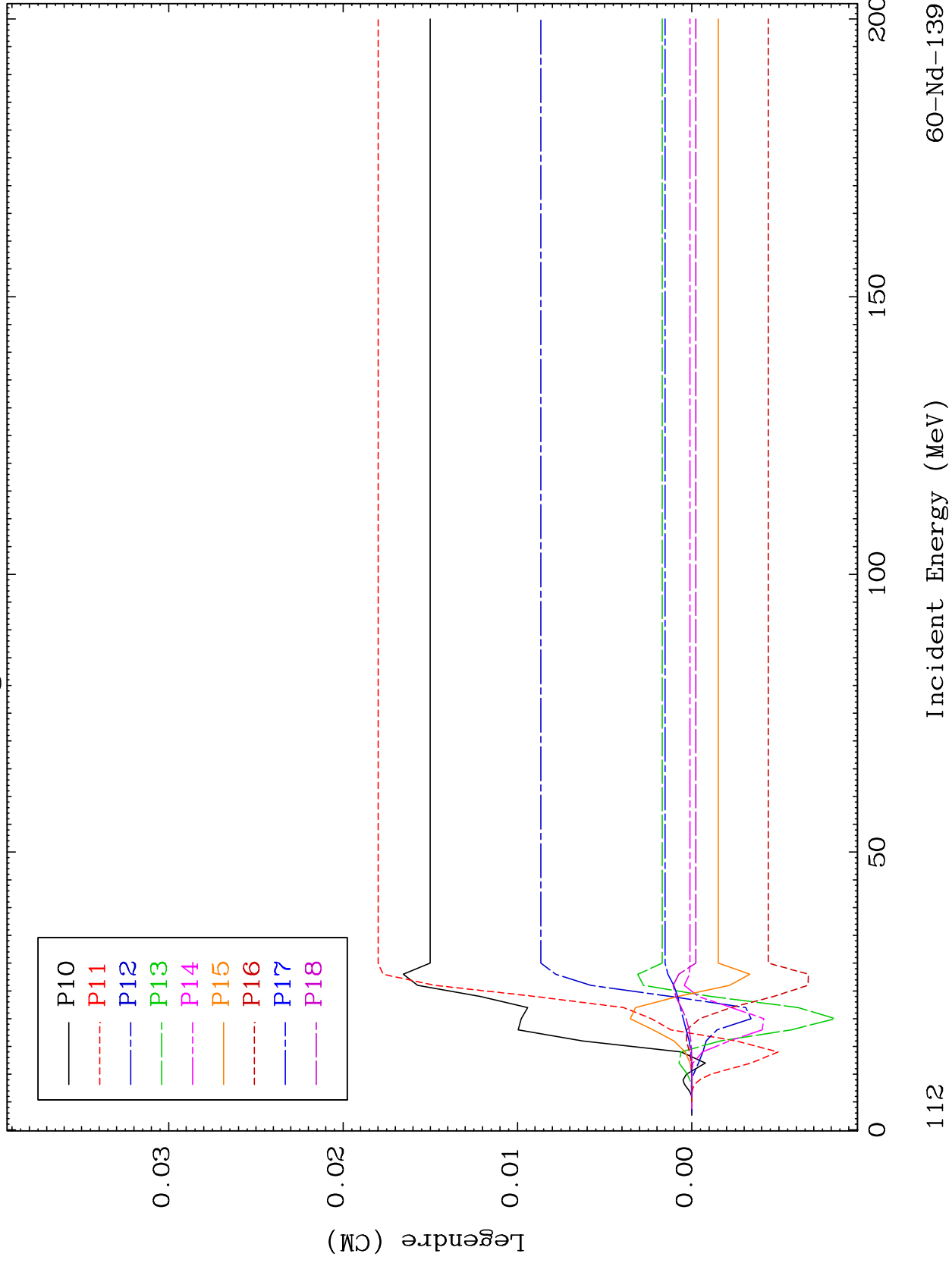
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

60-Nd-139



112

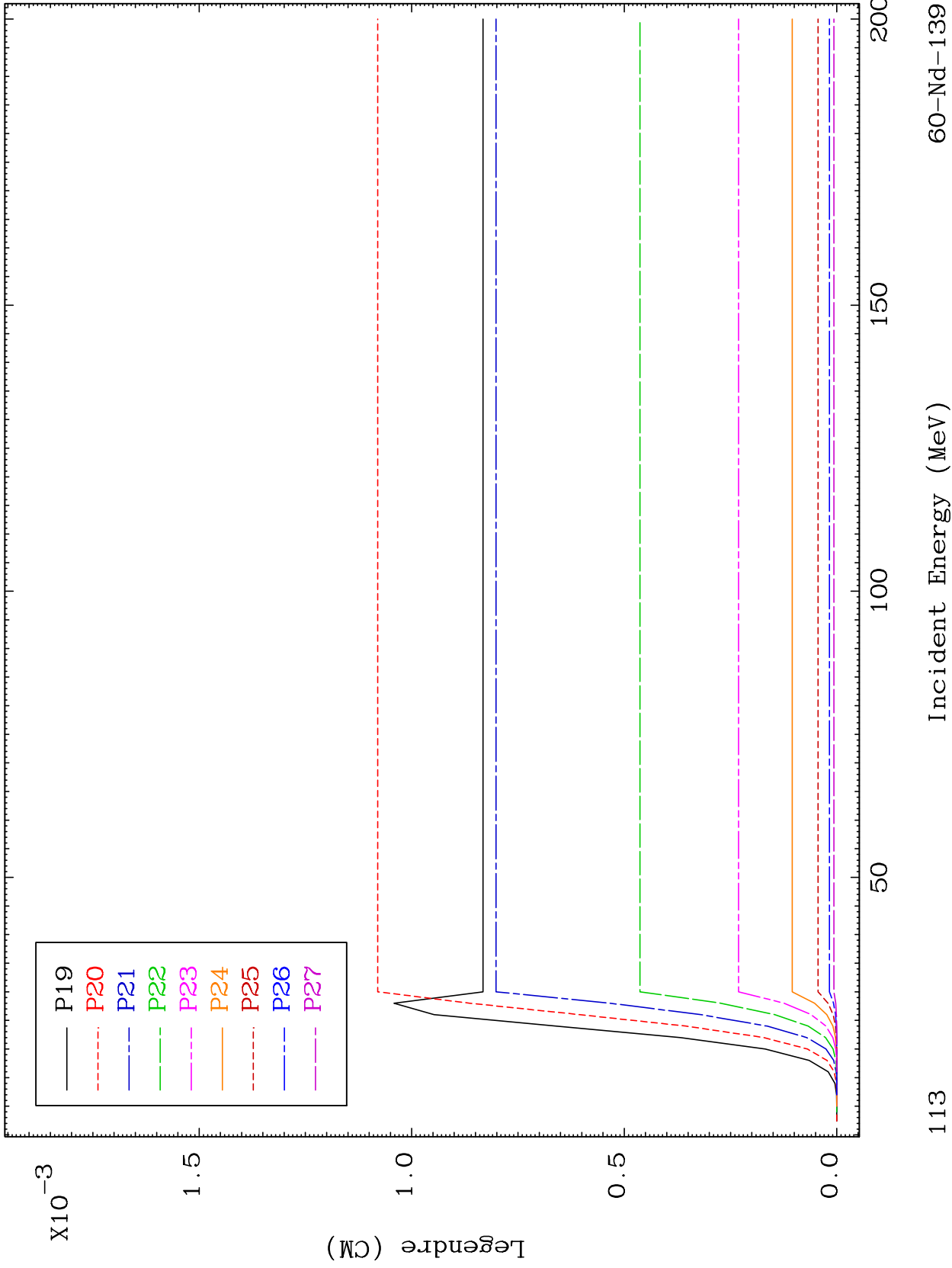
Incident Energy (MeV)

60-Nd-139

MAT 6016

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

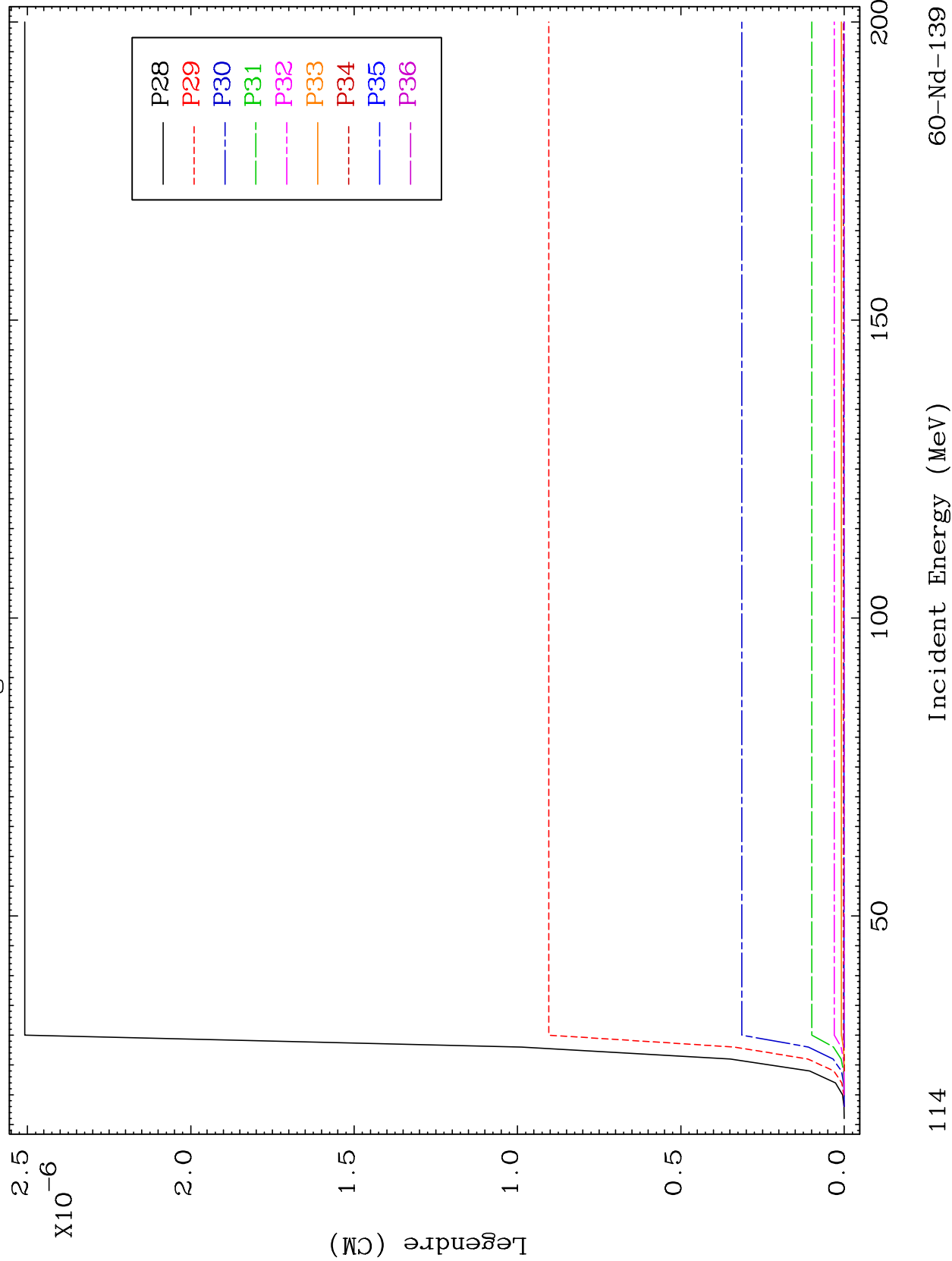
60-Nd-139



MAT 6016

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

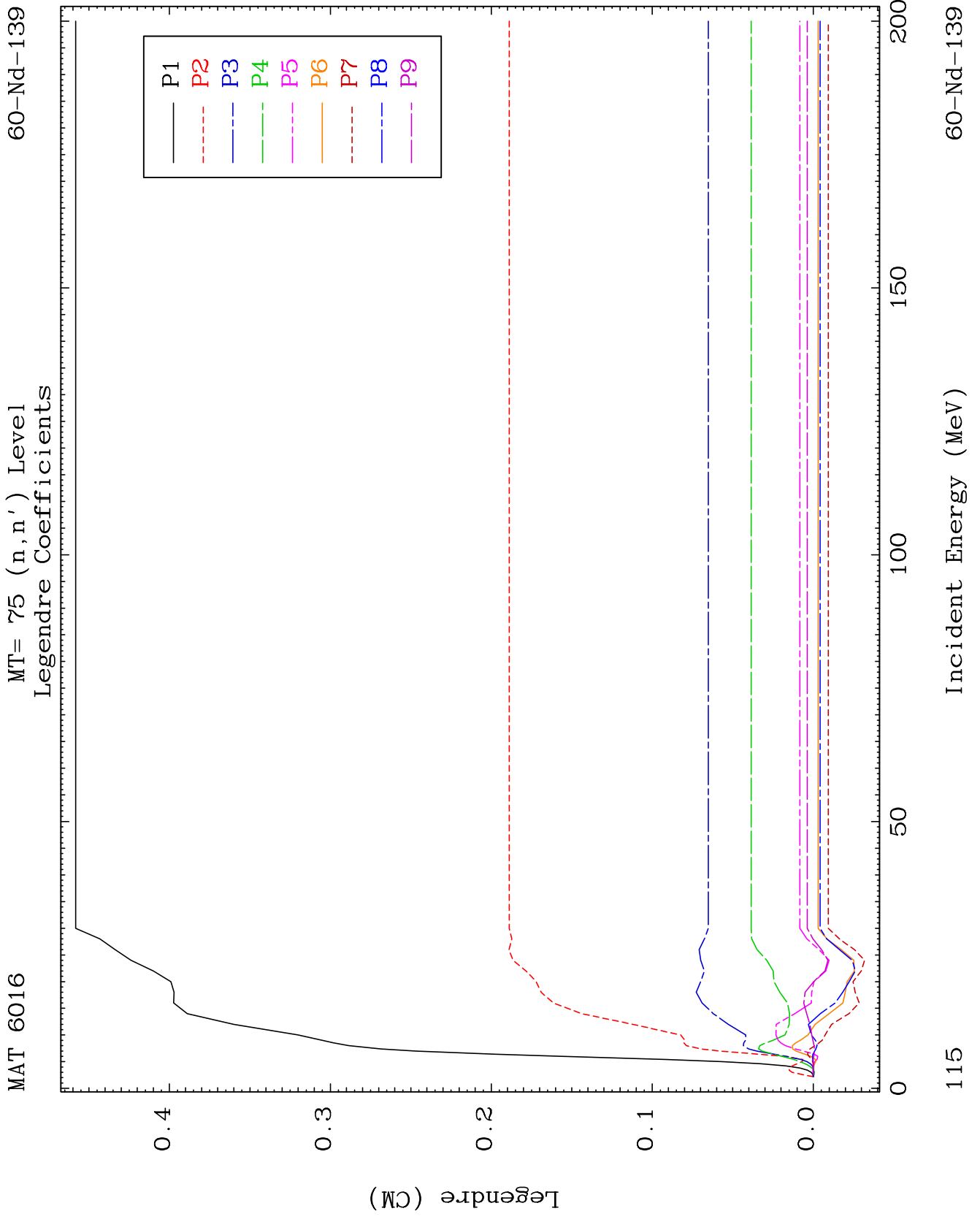
60-Nd-139



114

Incident Energy (MeV)

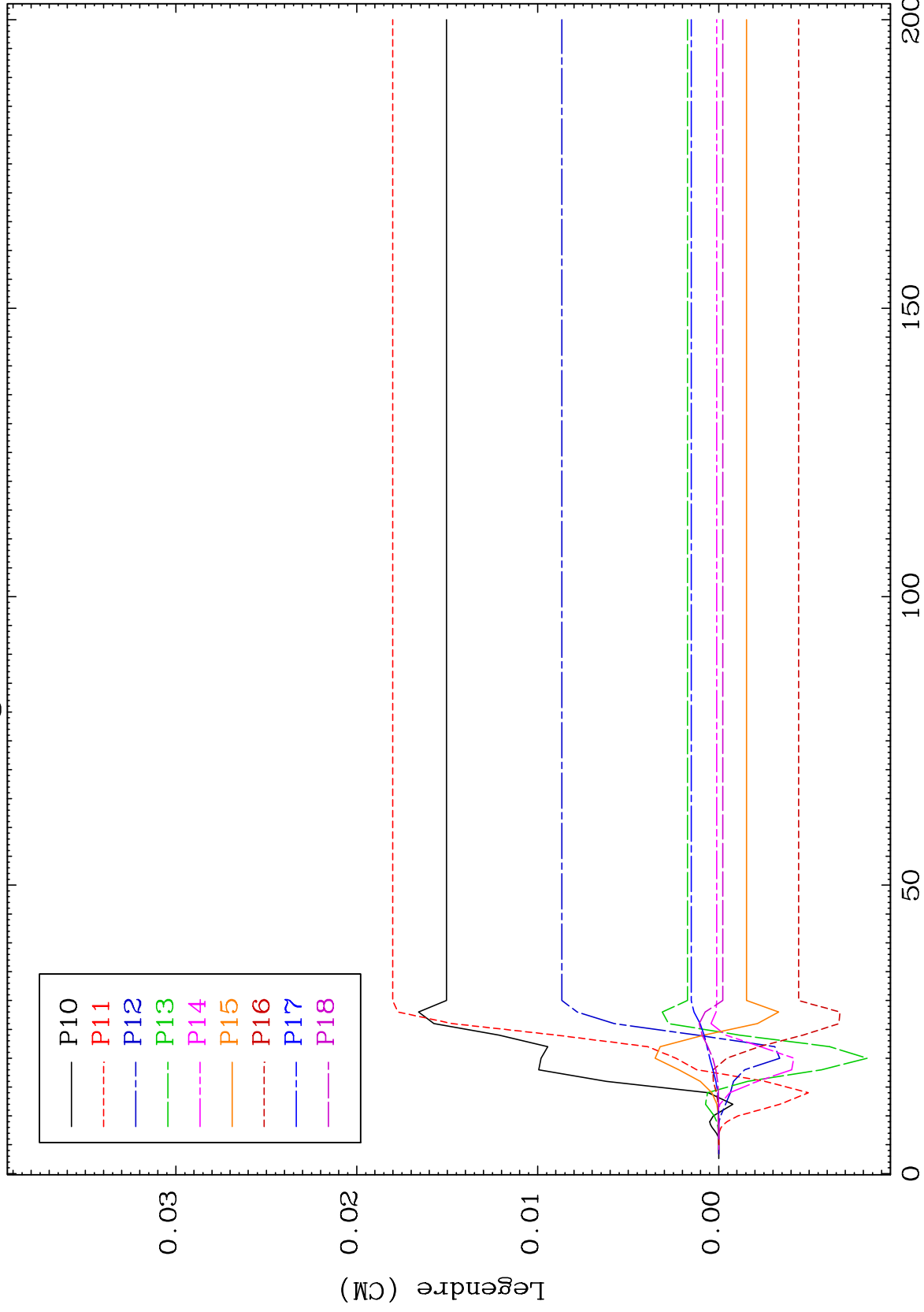
60-Nd-139



MAT 6016

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

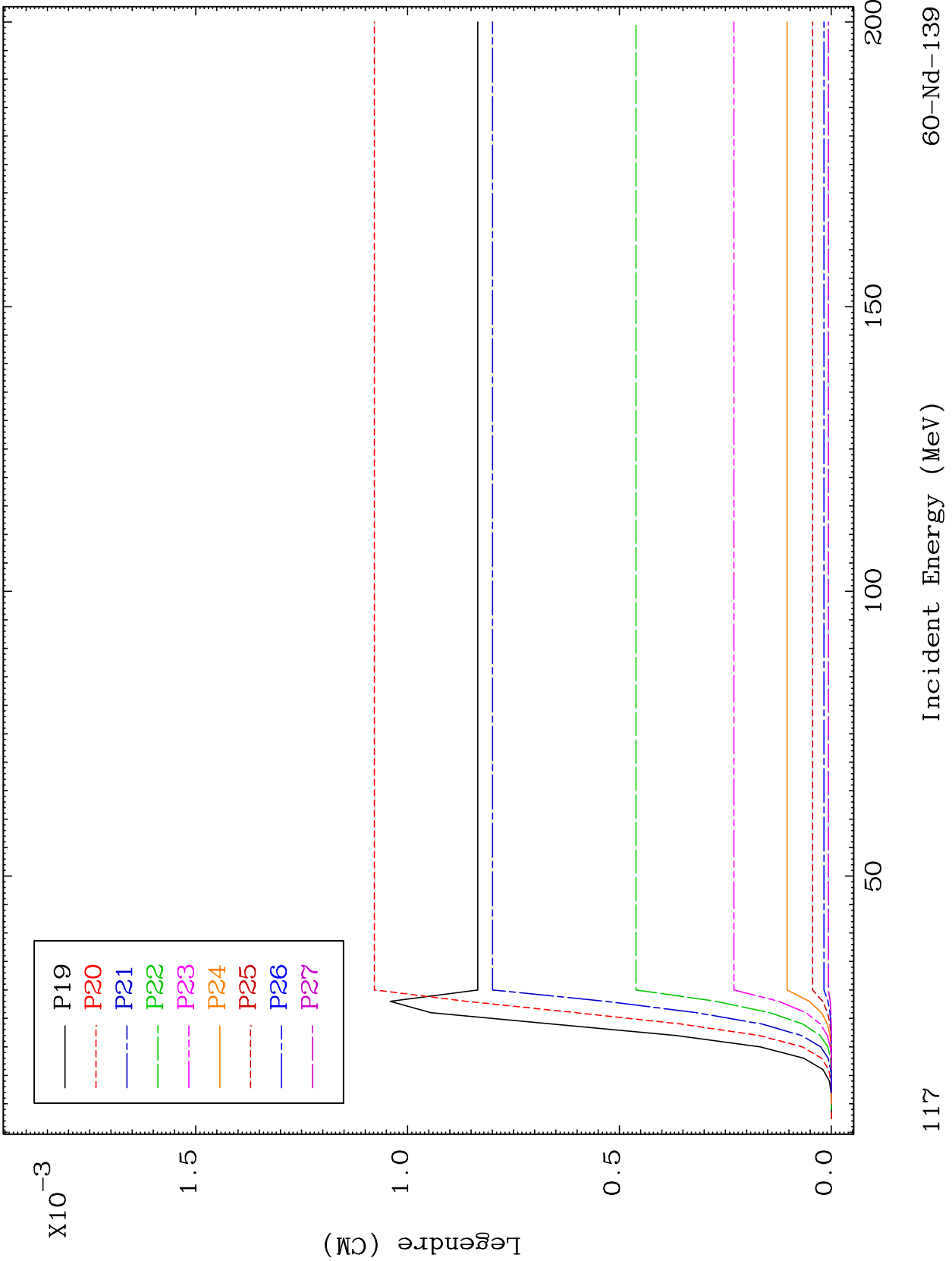
60-Nd-139



116

Incident Energy (MeV)

60-Nd-139

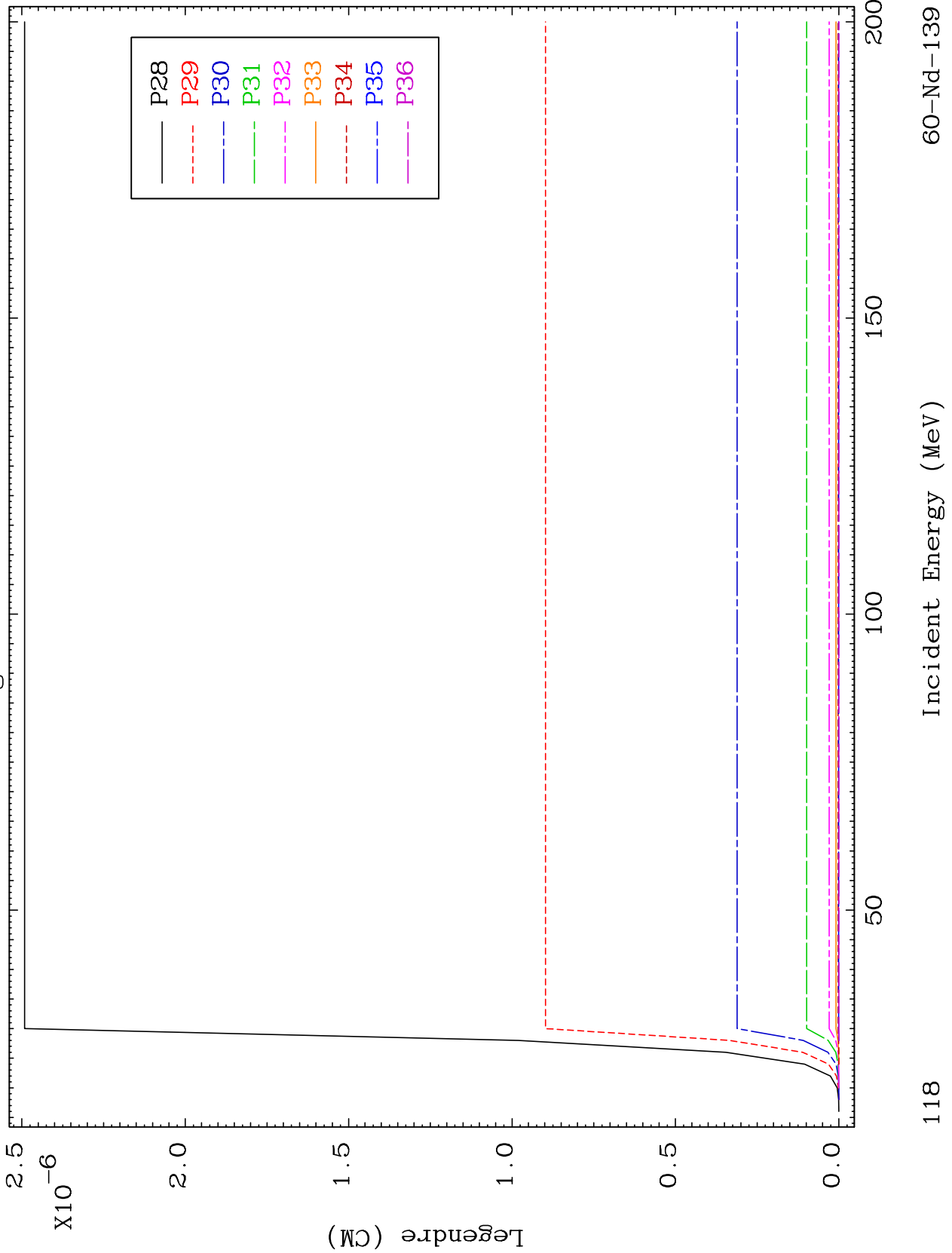


MAT 6016

MT= 75 (n,n') Level

60-Nd-139

Legendre Coefficients



60-Nd-139

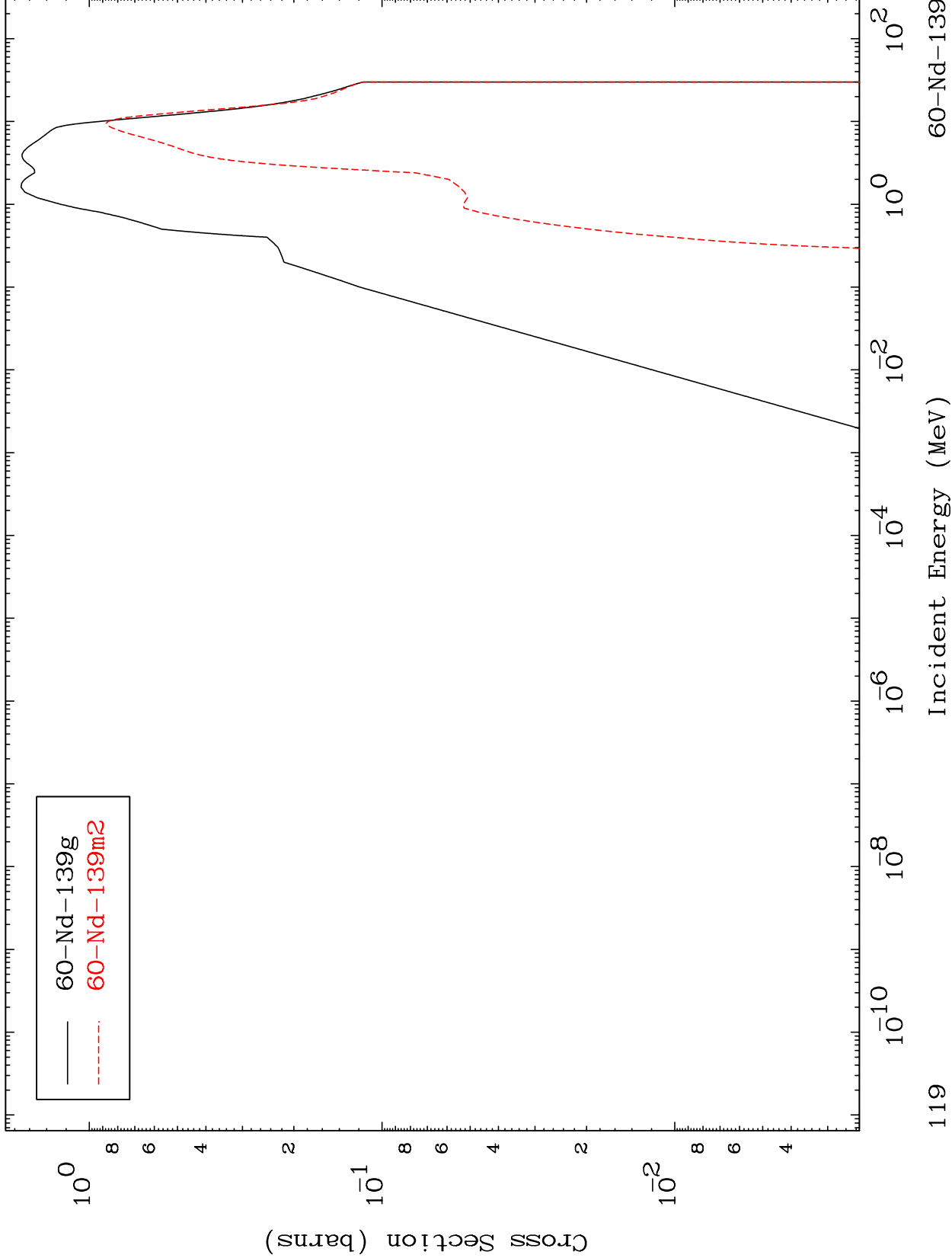
Incident Energy (MeV)

118

MAT 6016

Inelastic
Radionuclide Production Cross Section

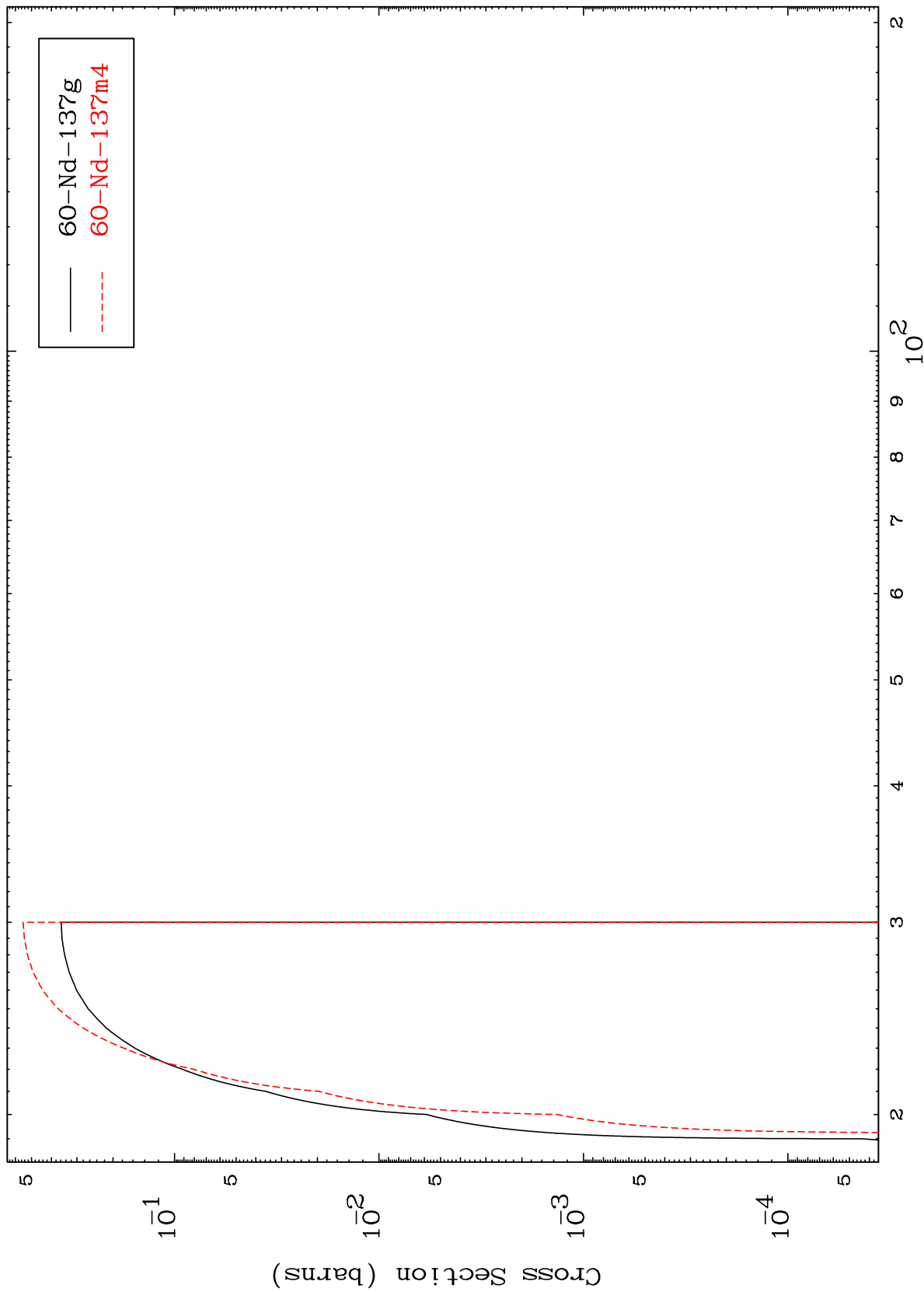
60-Nd-139



MAT 6016

60-Nd-139

(n,3n)
Radionuclide Production Cross Section



60-Nd-139

Incident Energy (MeV)

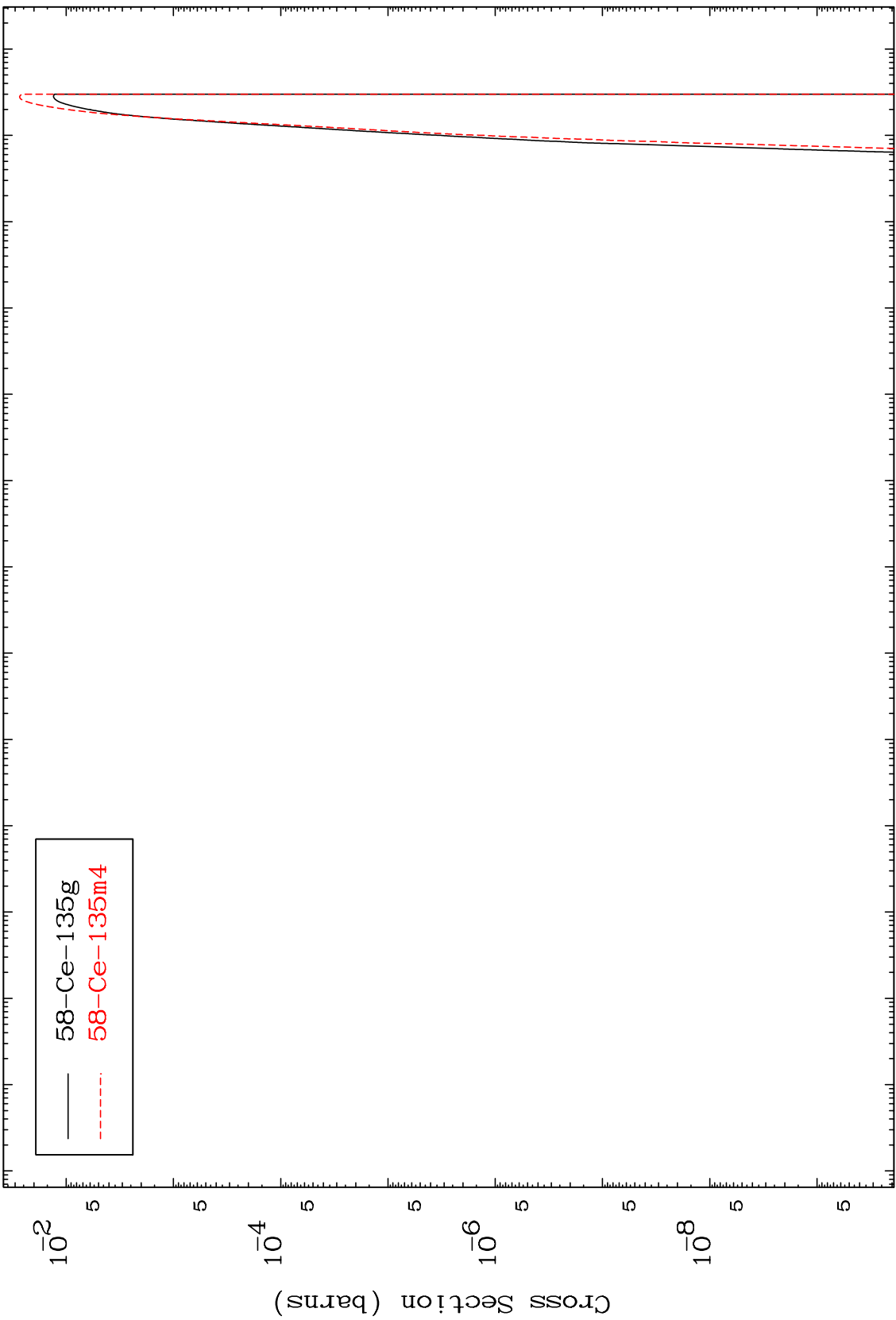
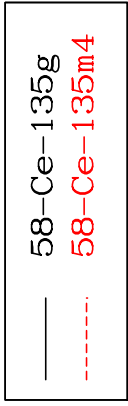
120

MAT 6016

$(n, n') \alpha$

60-Nd-139

Radionuclide Production Cross Section



60-Nd-139

10⁰

10⁻⁴

10⁻⁶

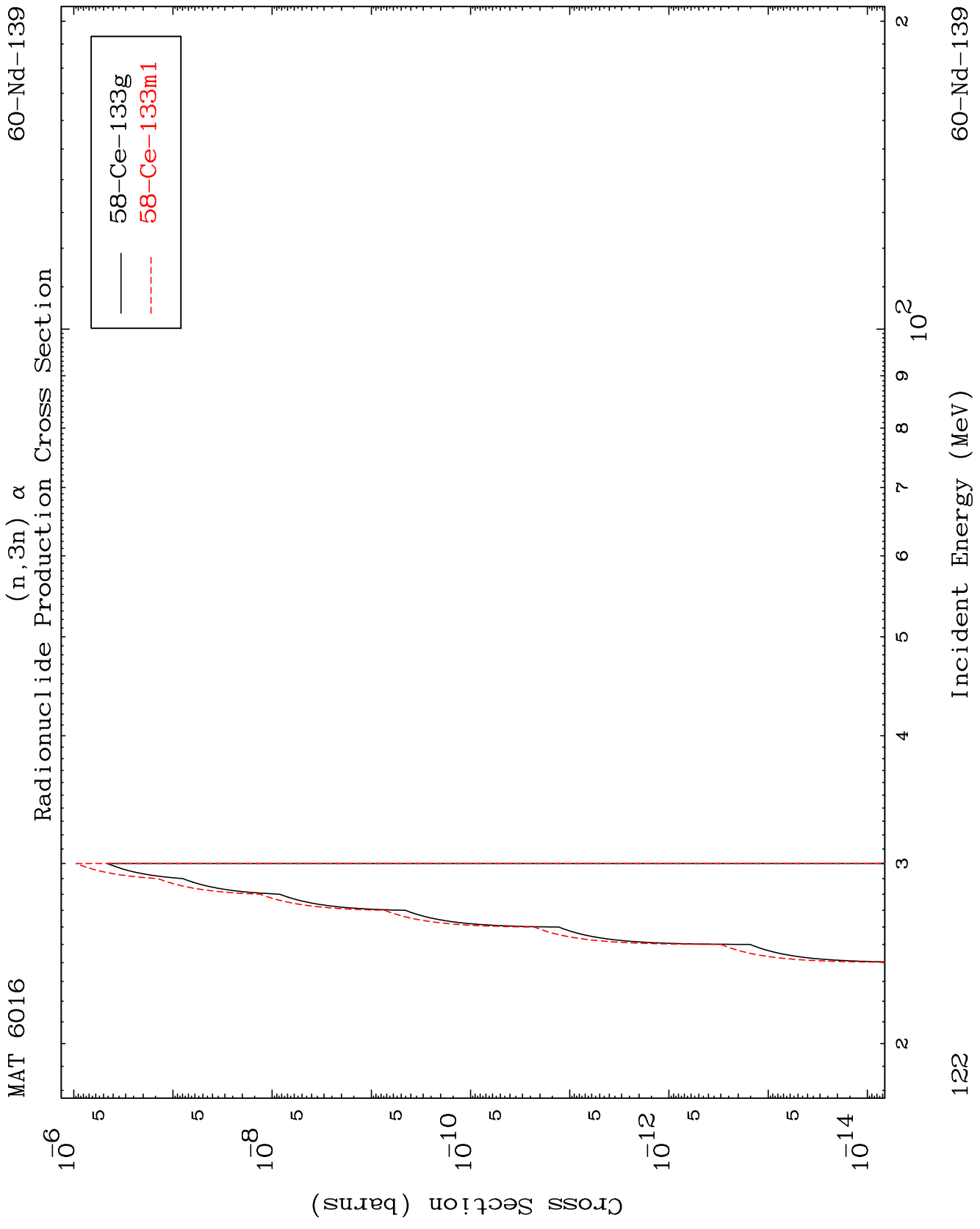
10⁻⁸

10⁻¹⁰

10²

Incident Energy (MeV)

121

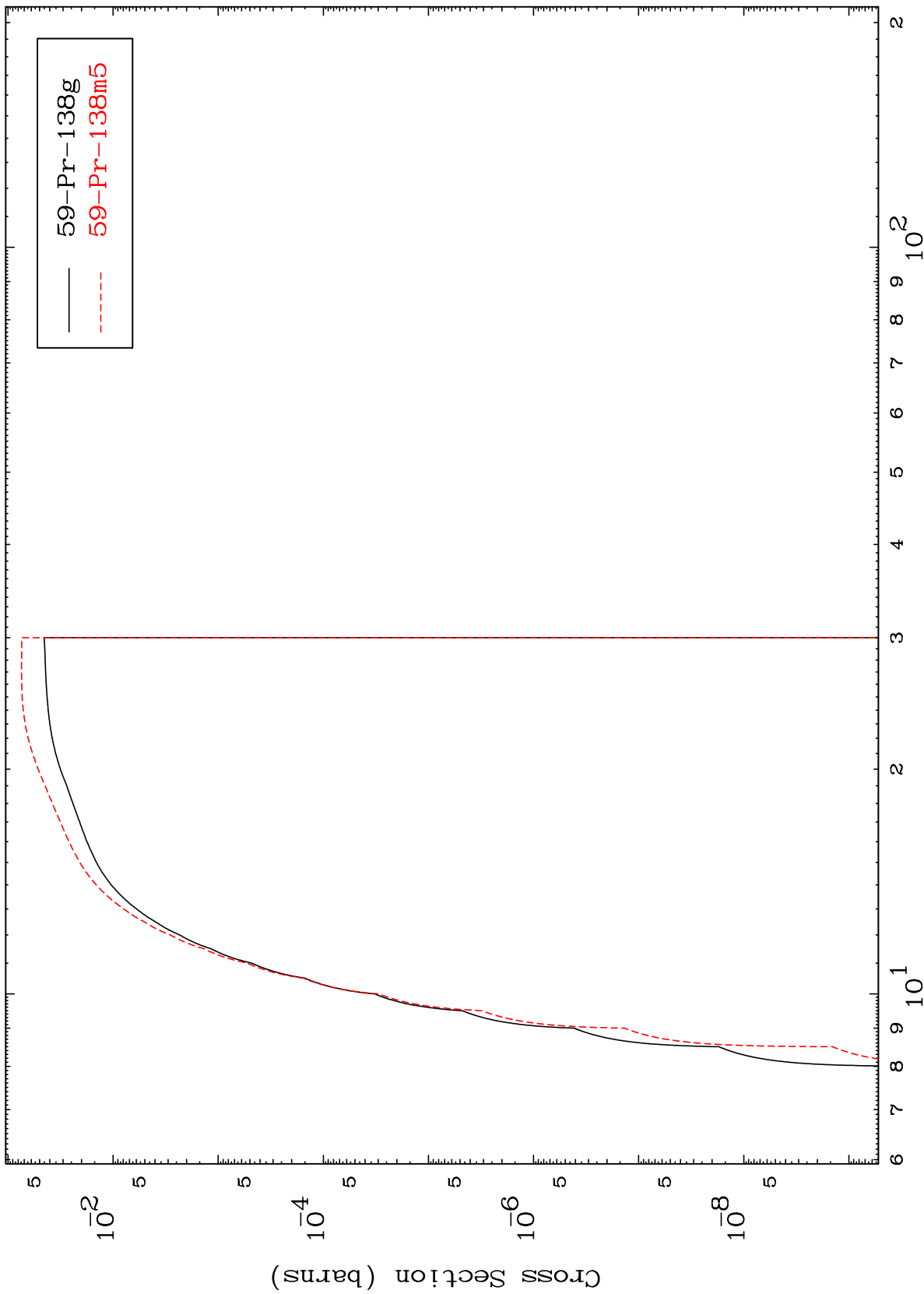


MAT 6016

(n,n') p

60-Nd-139

Radionuclide Production Cross Section



123

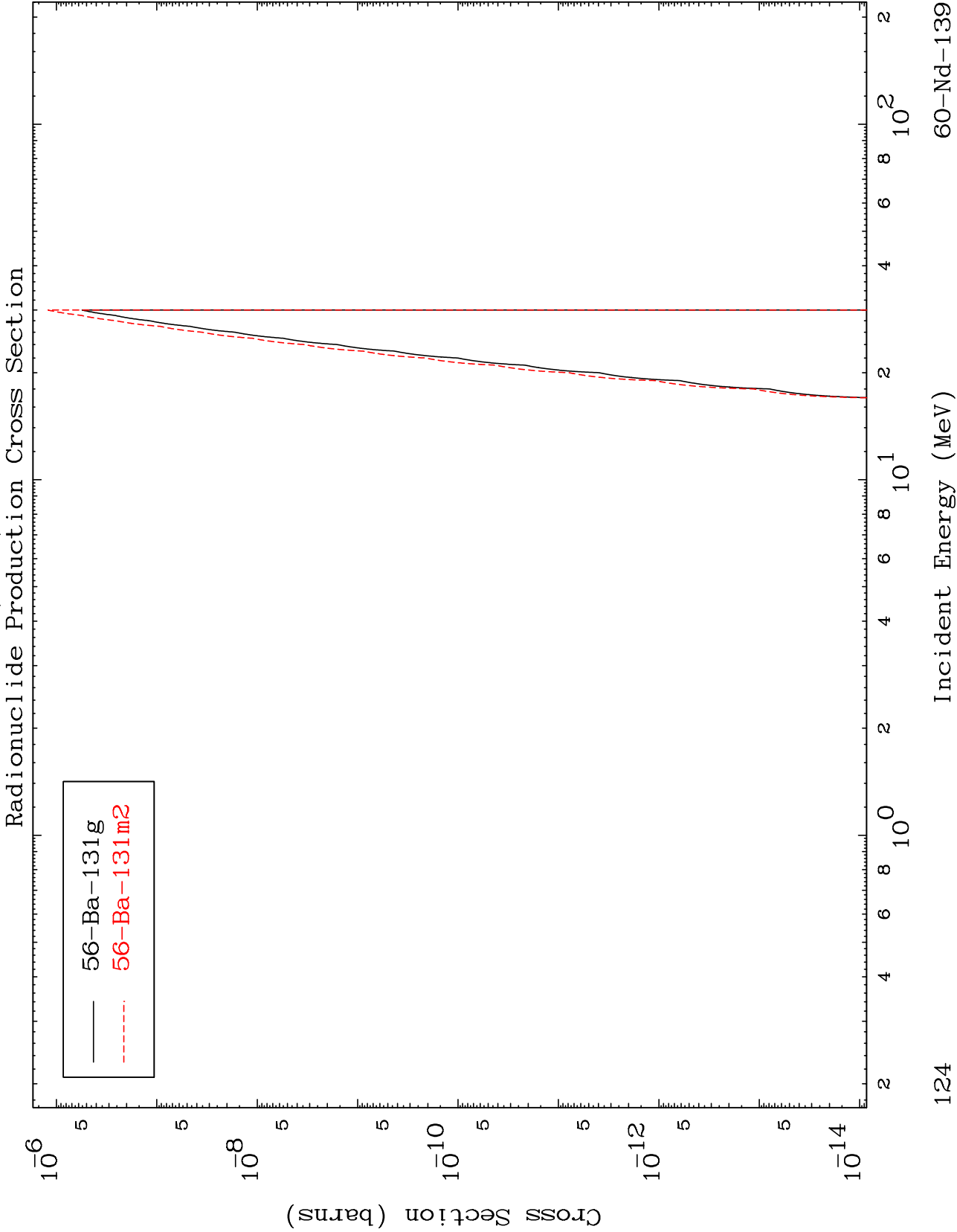
Incident Energy (MeV)

60-Nd-139

MAT 6016

(n,n') 2 α

60-Nd-139

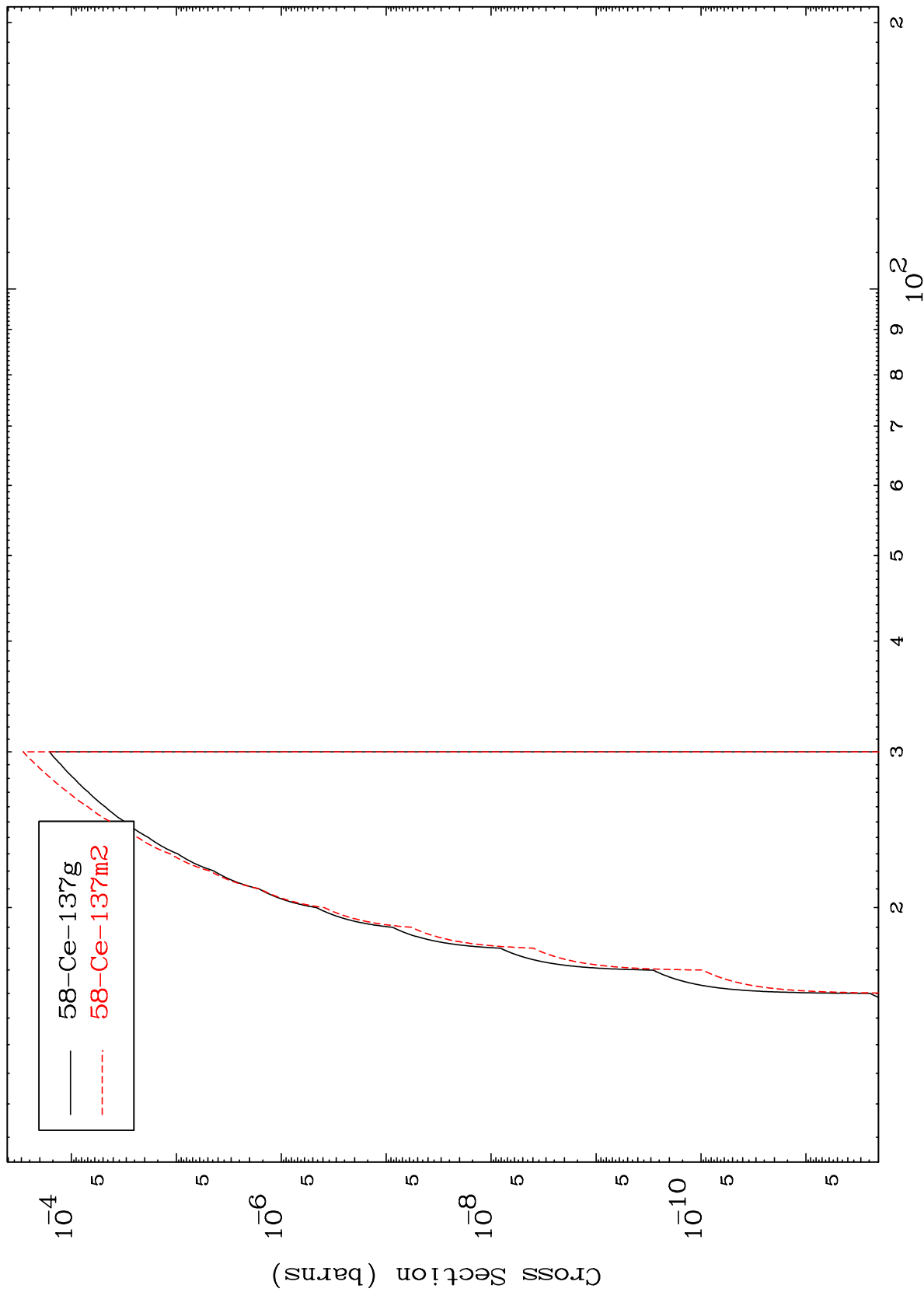


56-Ba-131g
56-Ba-131m2

MAT 6016

60-Nd-139

(n,2n) p
Radionuclide Production Cross Section



60-Nd-139

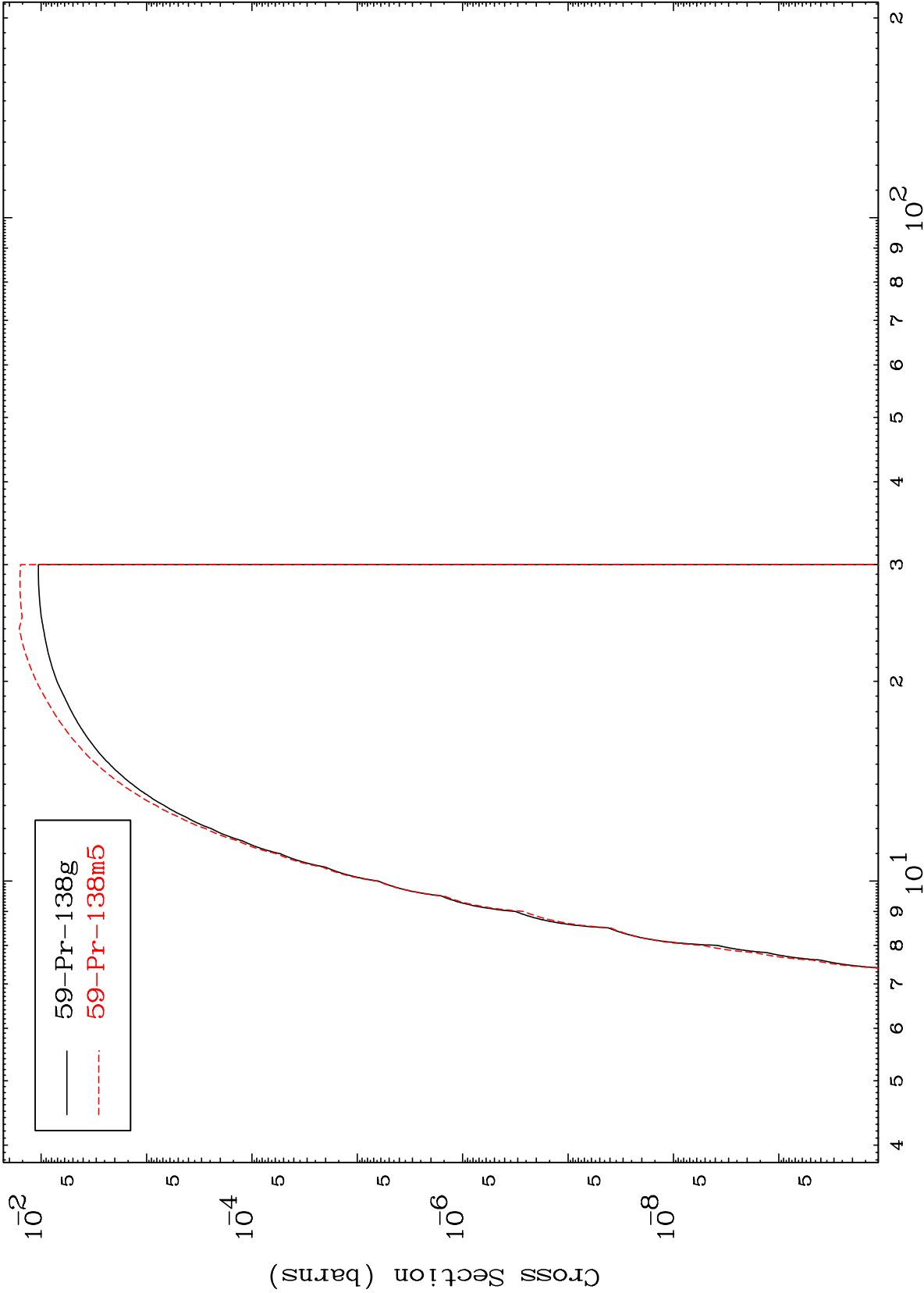
Incident Energy (MeV)

125

MAT 6016

60-Nd-139

(n,d)
Radionuclide Production Cross Section



— 59-Pr-138g
- - - 59-Pr-138m5

126

Incident Energy (MeV)

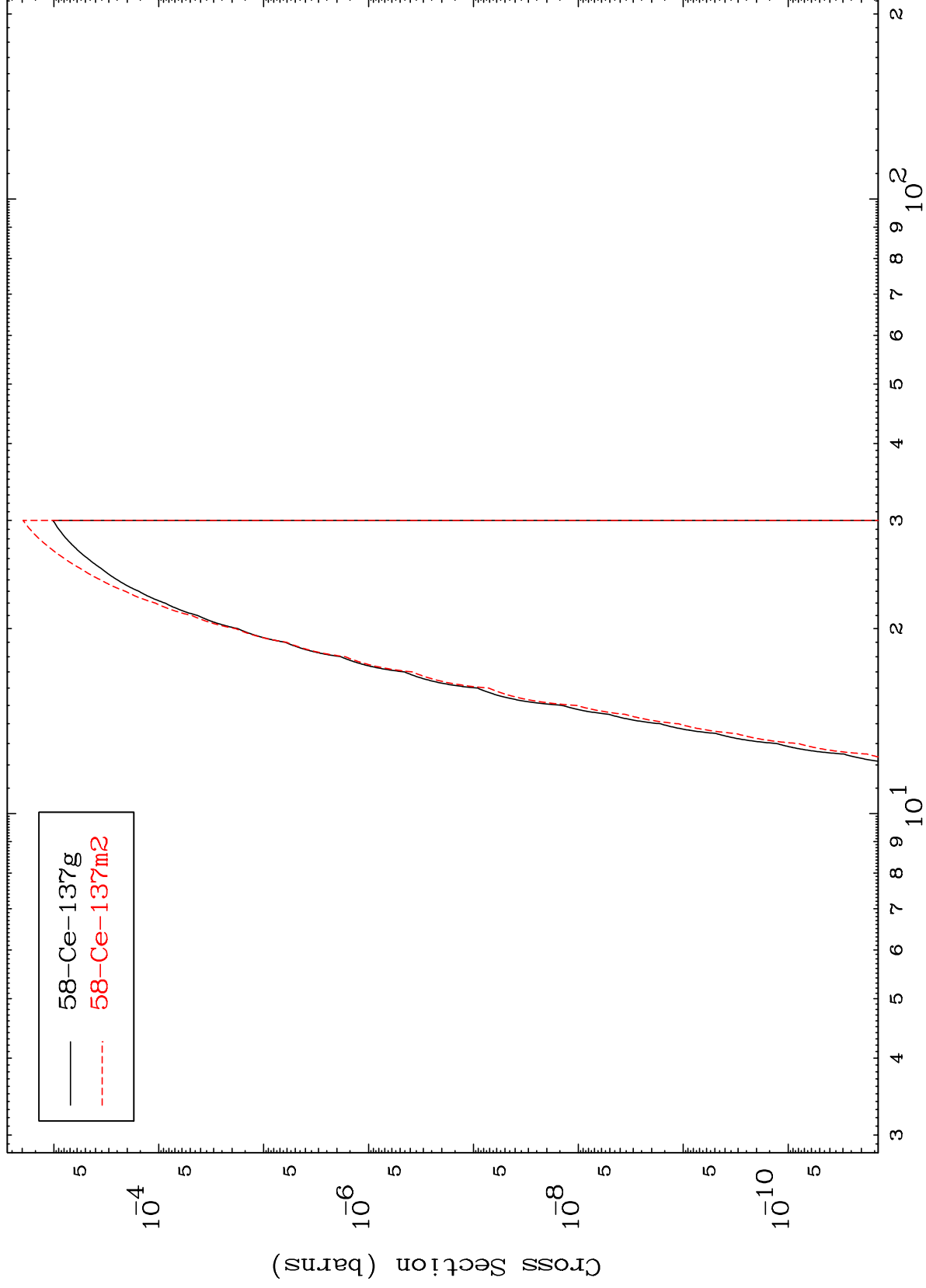
60-Nd-139

MAT 6016

(n,He-3)

60-Nd-139

Radionuclide Production Cross Section



127

Incident Energy (MeV)

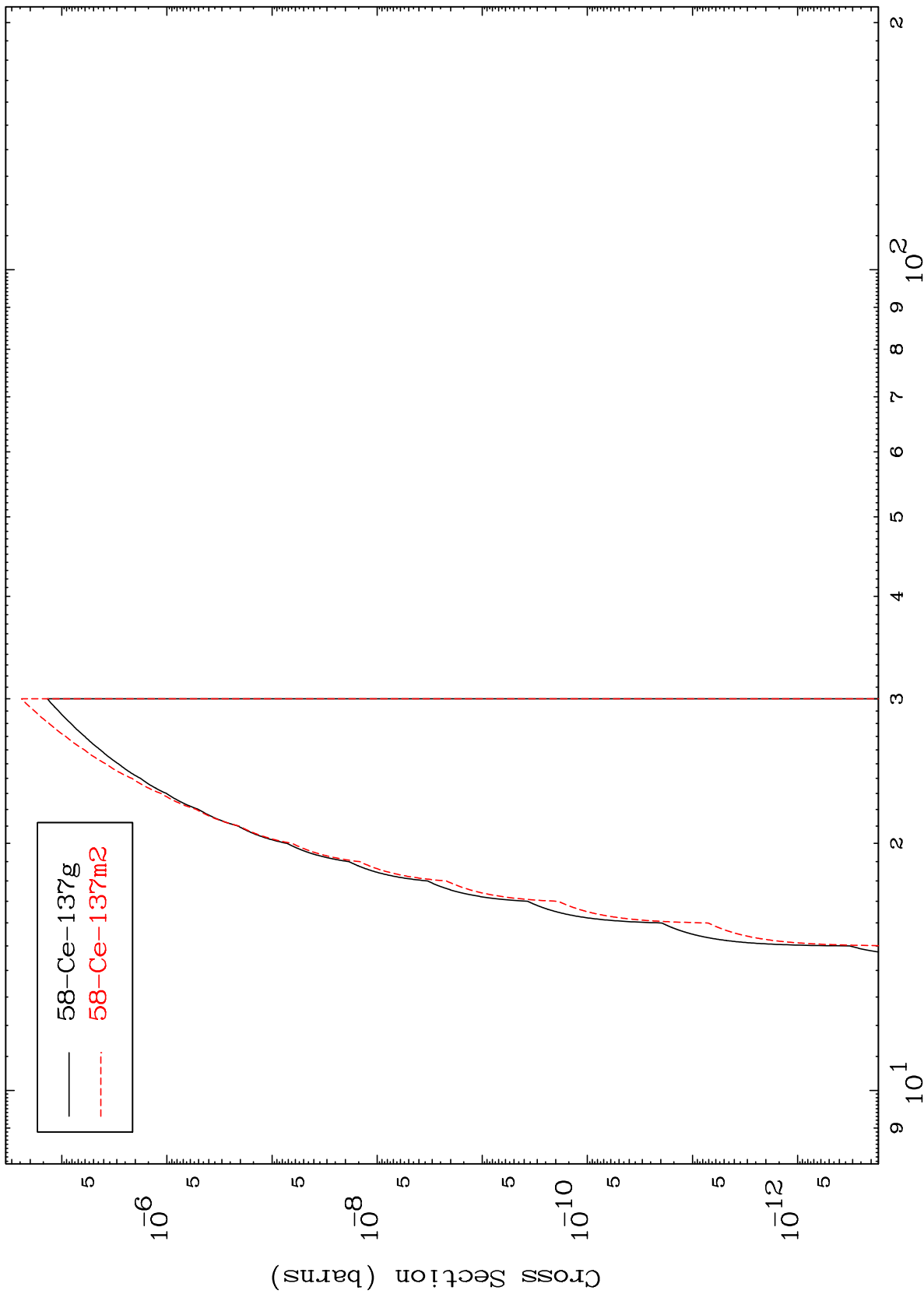
60-Nd-139

MAT 6016

(n,p) d

60-Nd-139

Radionuclide Production Cross Section



128

Incident Energy (MeV)

60-Nd-139