

Program EVALPLOT
(Version 2015-2)

by

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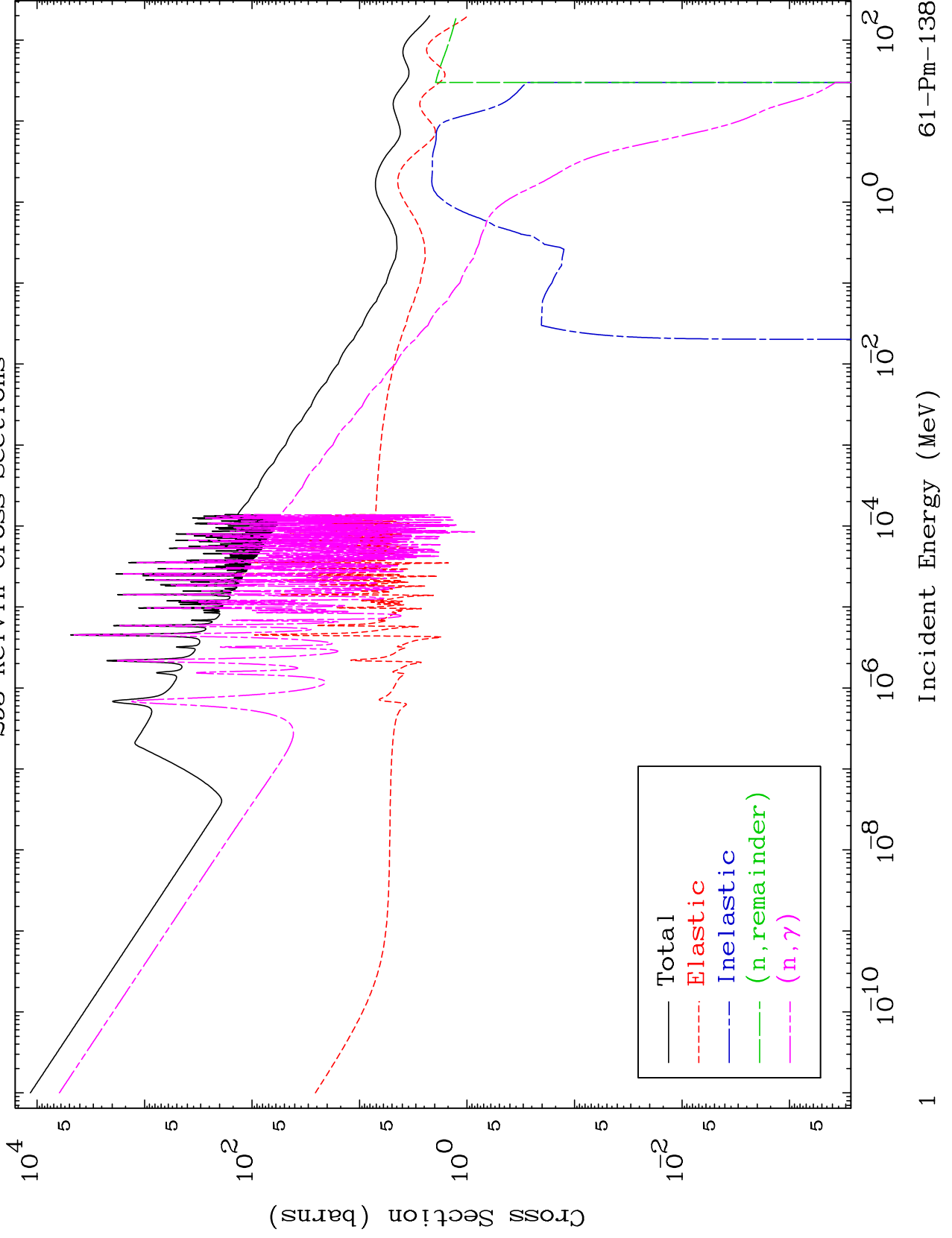
E.Mail:redcullen1@comcast.net
Web:home.comcast.net/~redcullen1

Press Mouse Button to Start

MAT 6122

Major
293 Kelvin Cross Sections

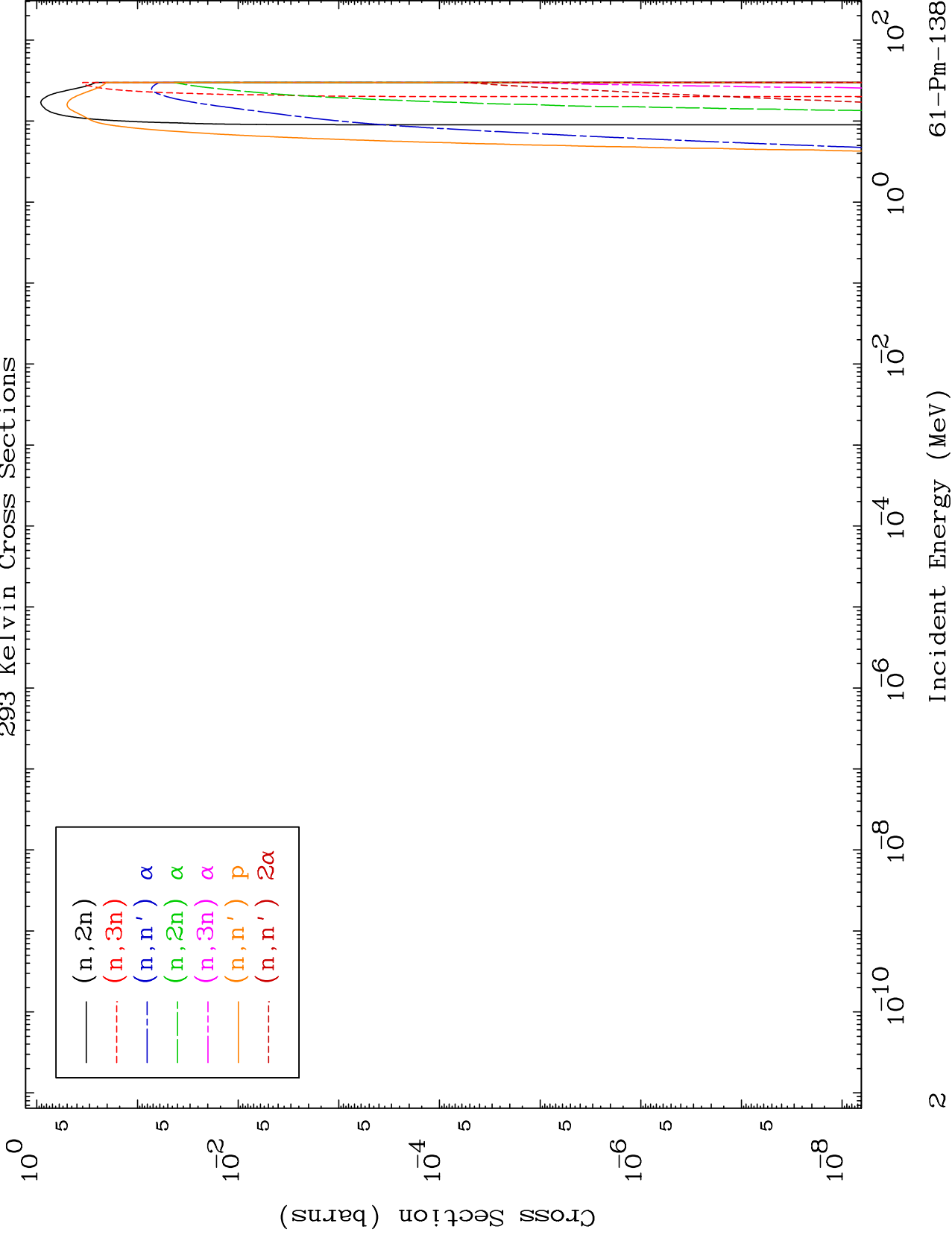
61-Pm-138

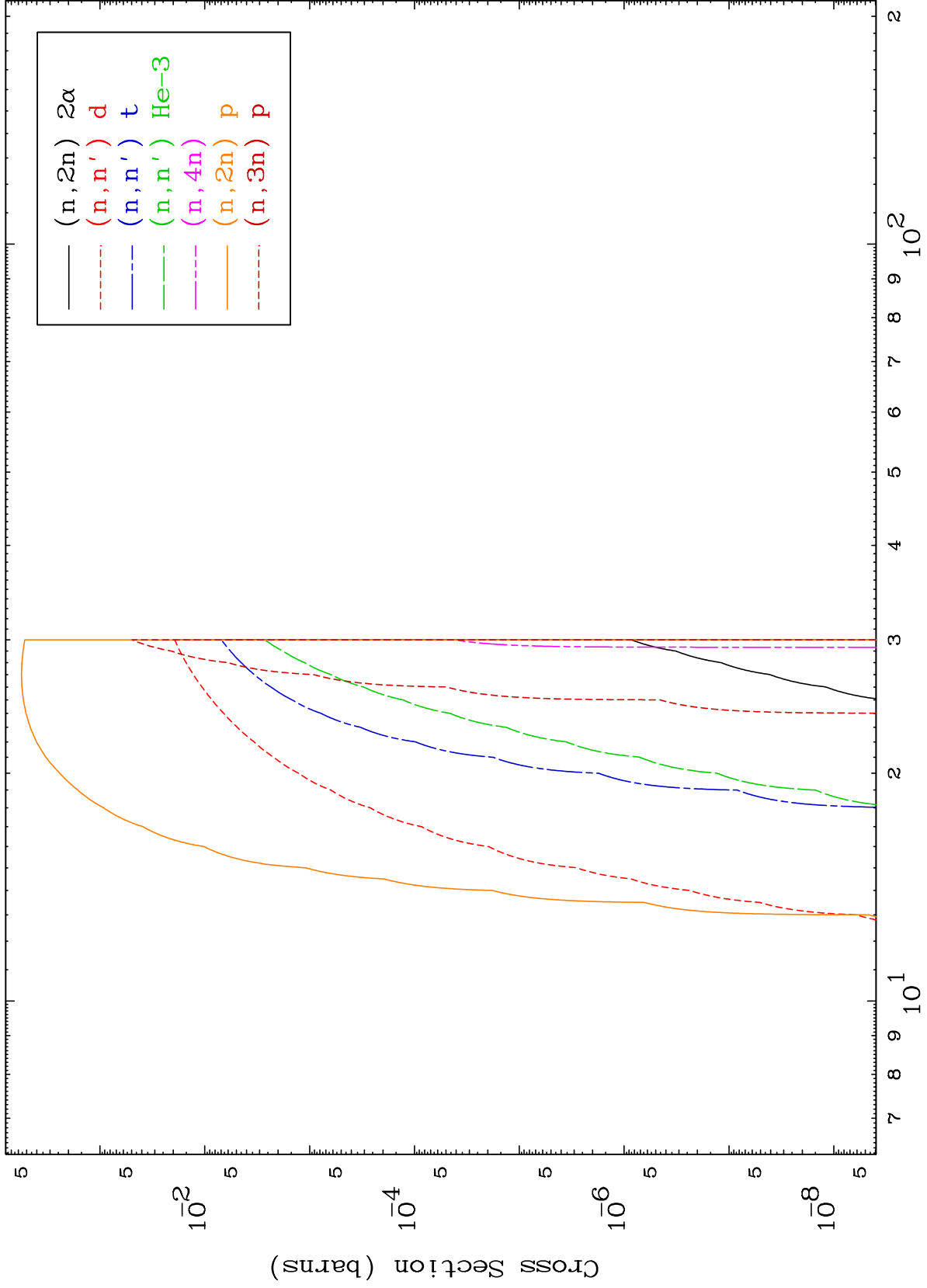


MAT 6122

Neutron Production
293 Kelvin Cross Sections

61-Pm-138

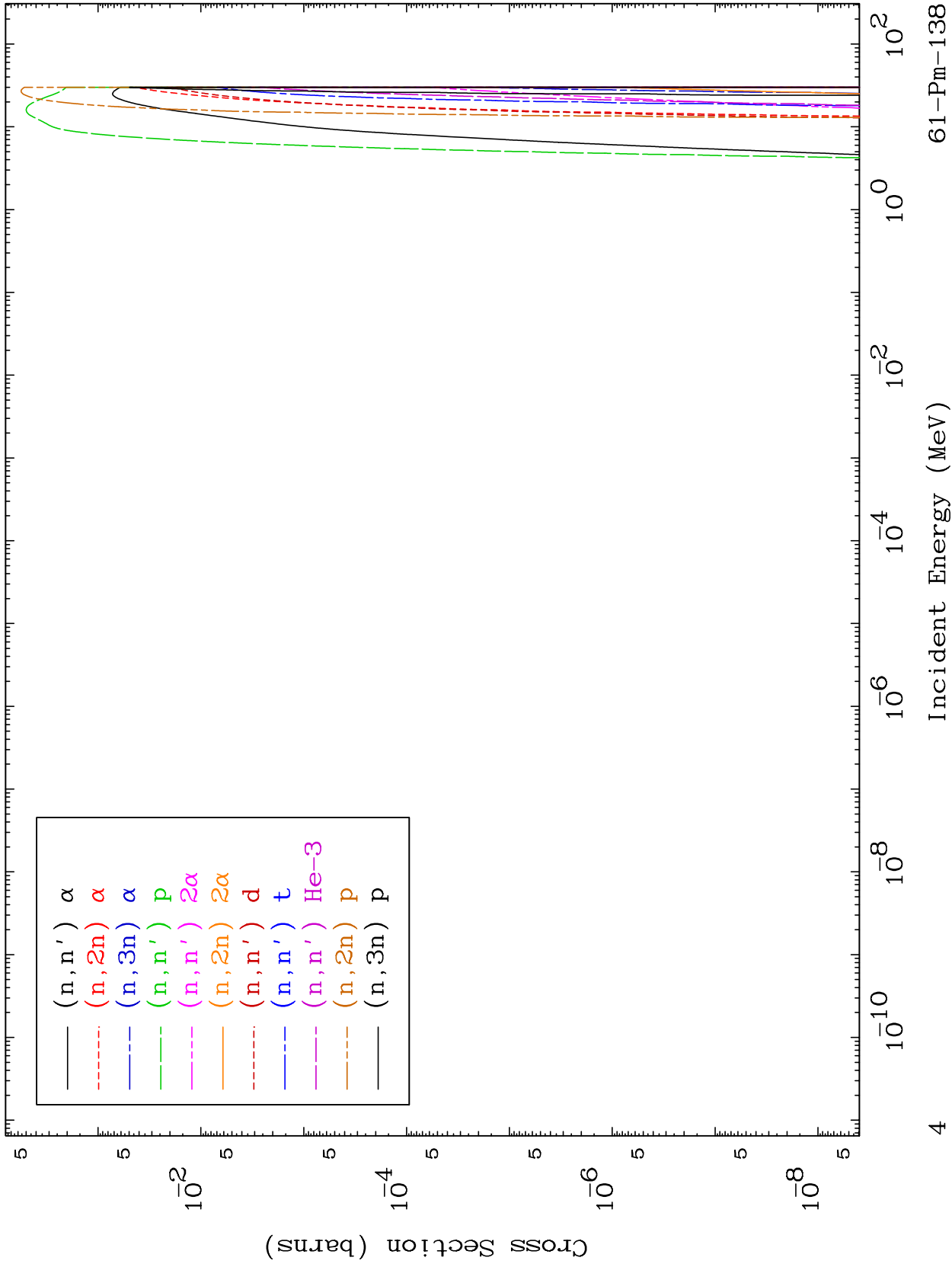




MAT 6122

Charged Particle
293 Kelvin Cross Sections

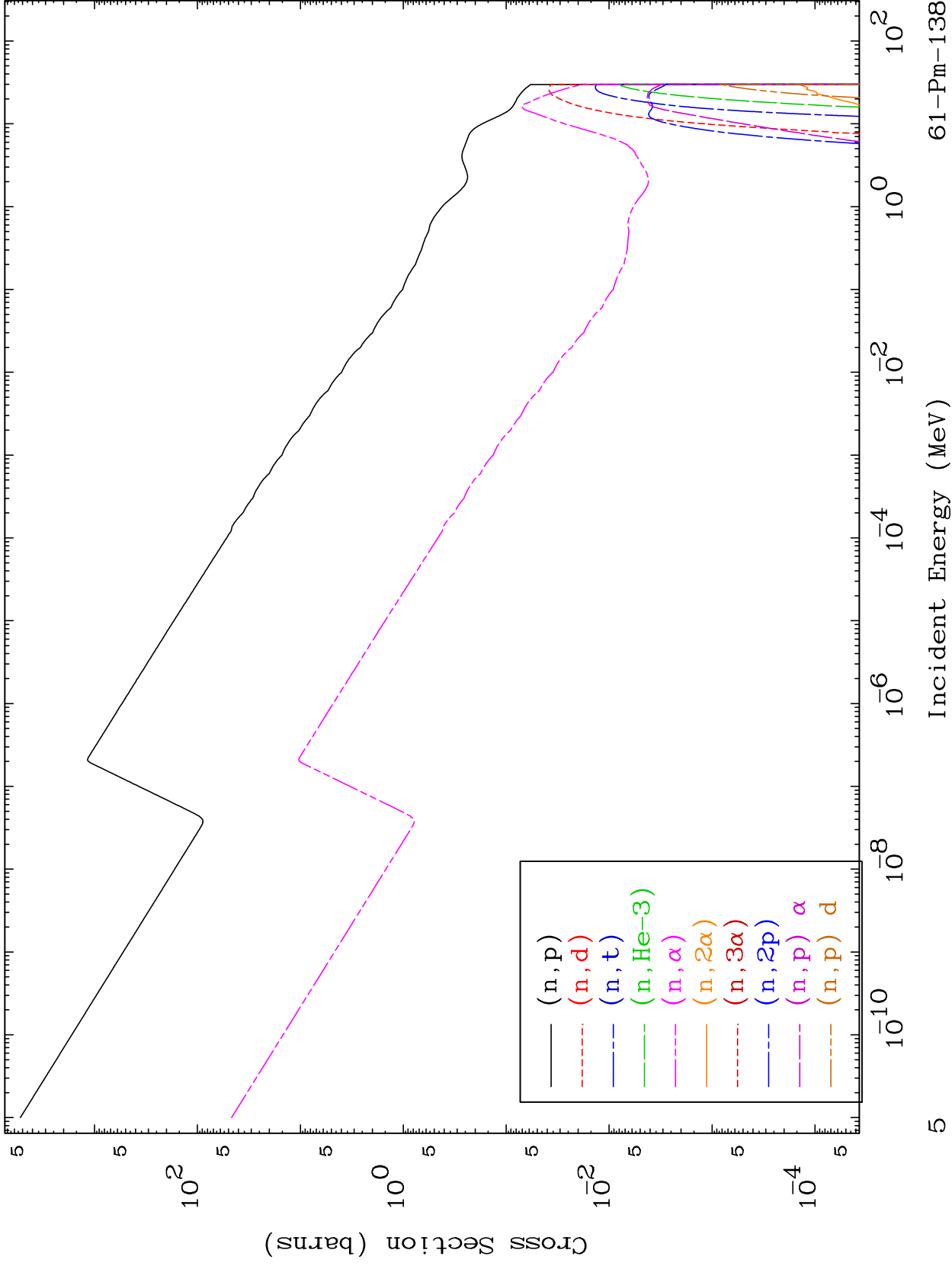
61-Pm-138



MAT 6122

Charged Particle
293 Kelvin Cross Sections

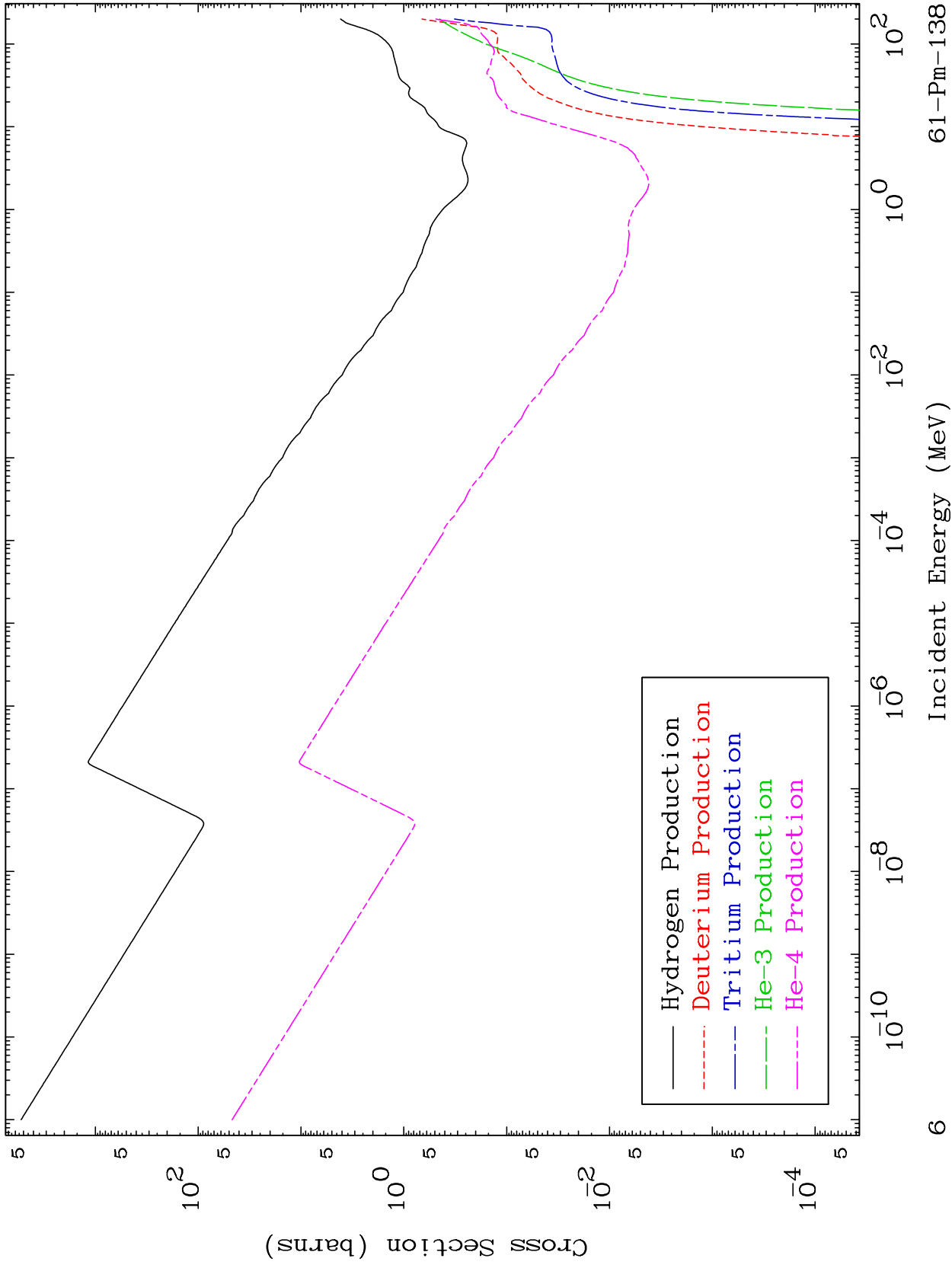
61-Pm-138



MAT 6122

Particle Production
293 Kelvin Cross Sections

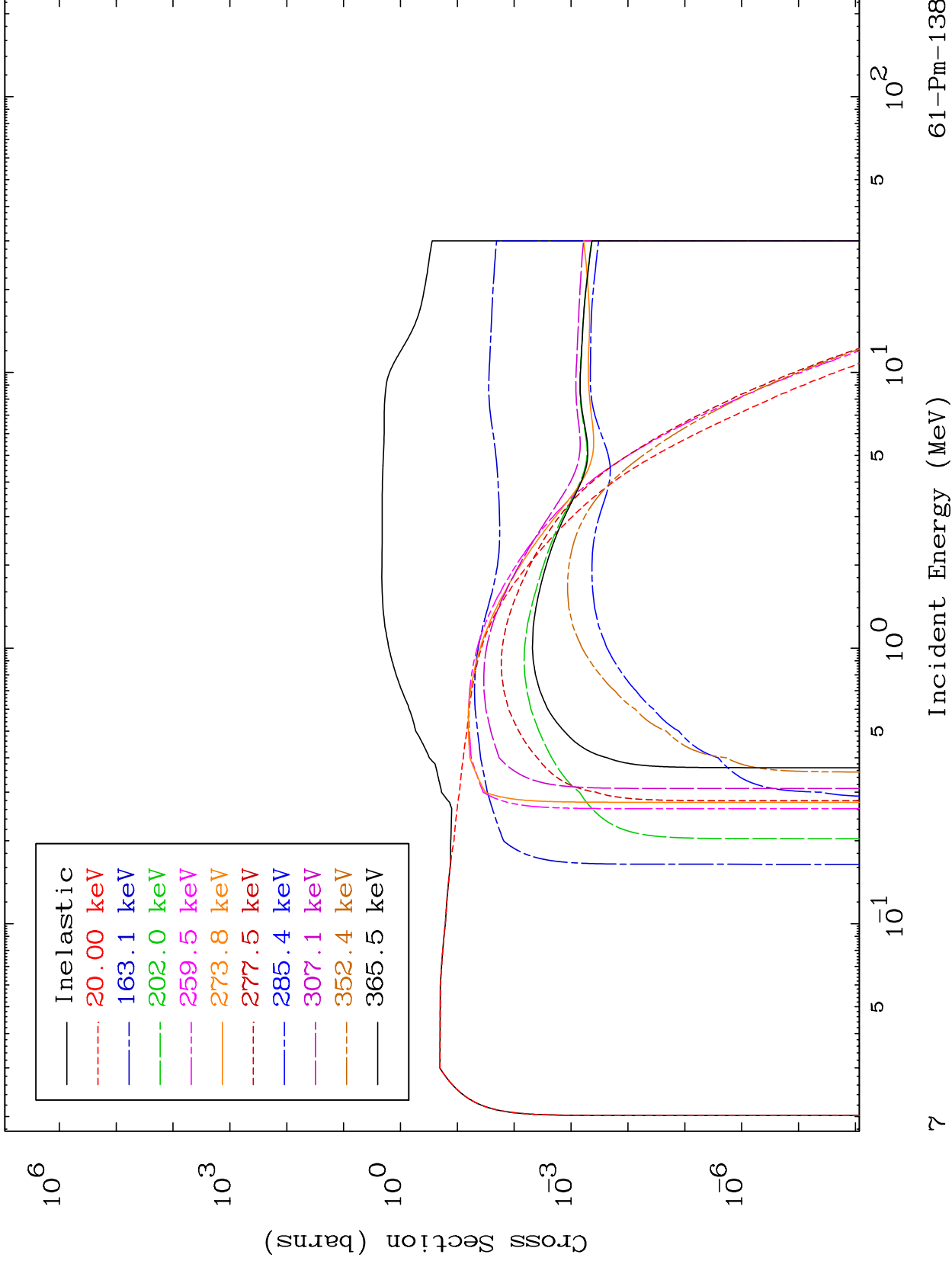
61-Pm-138



MAT 6122

(n,n') Level
293 Kelvin Cross Sections

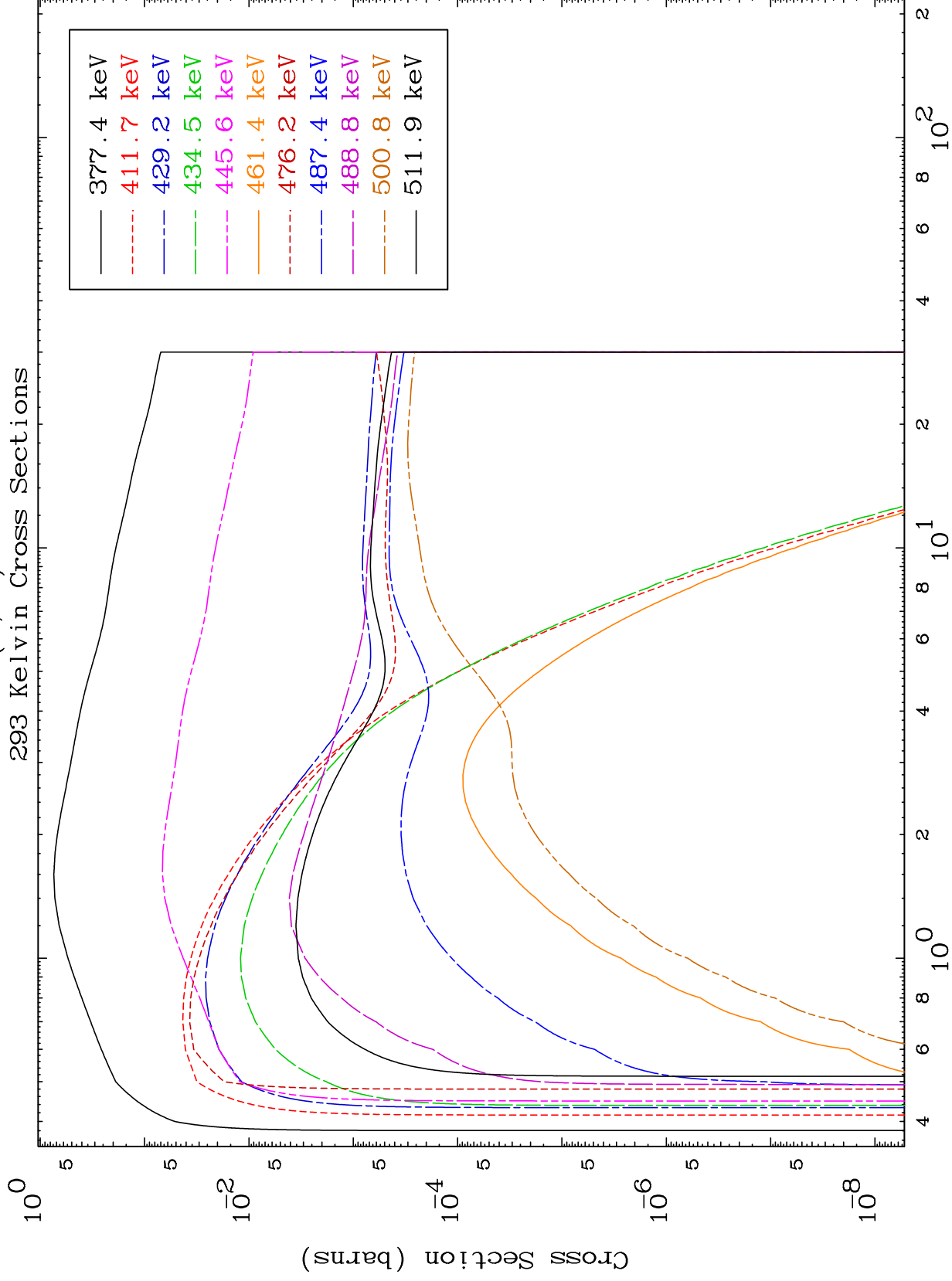
61-Pm-138



MAT 6122

(n,n') Level
293 Kelvin Cross Sections

61-Pm-138



8

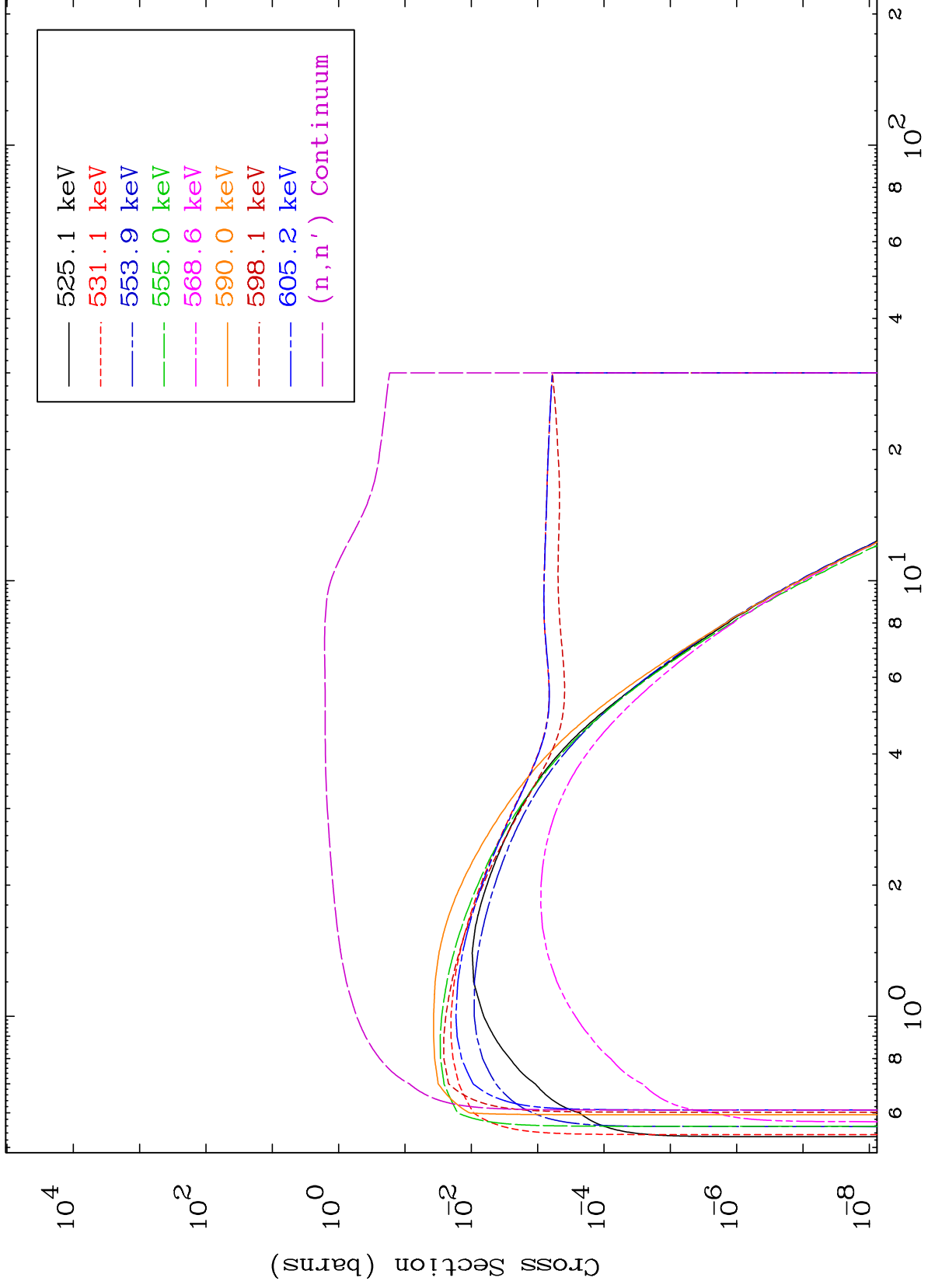
Incident Energy (MeV)

61-Pm-138

MAT 6122

(n,n') Level
293 Kelvin Cross Sections

61-Pm-138



9

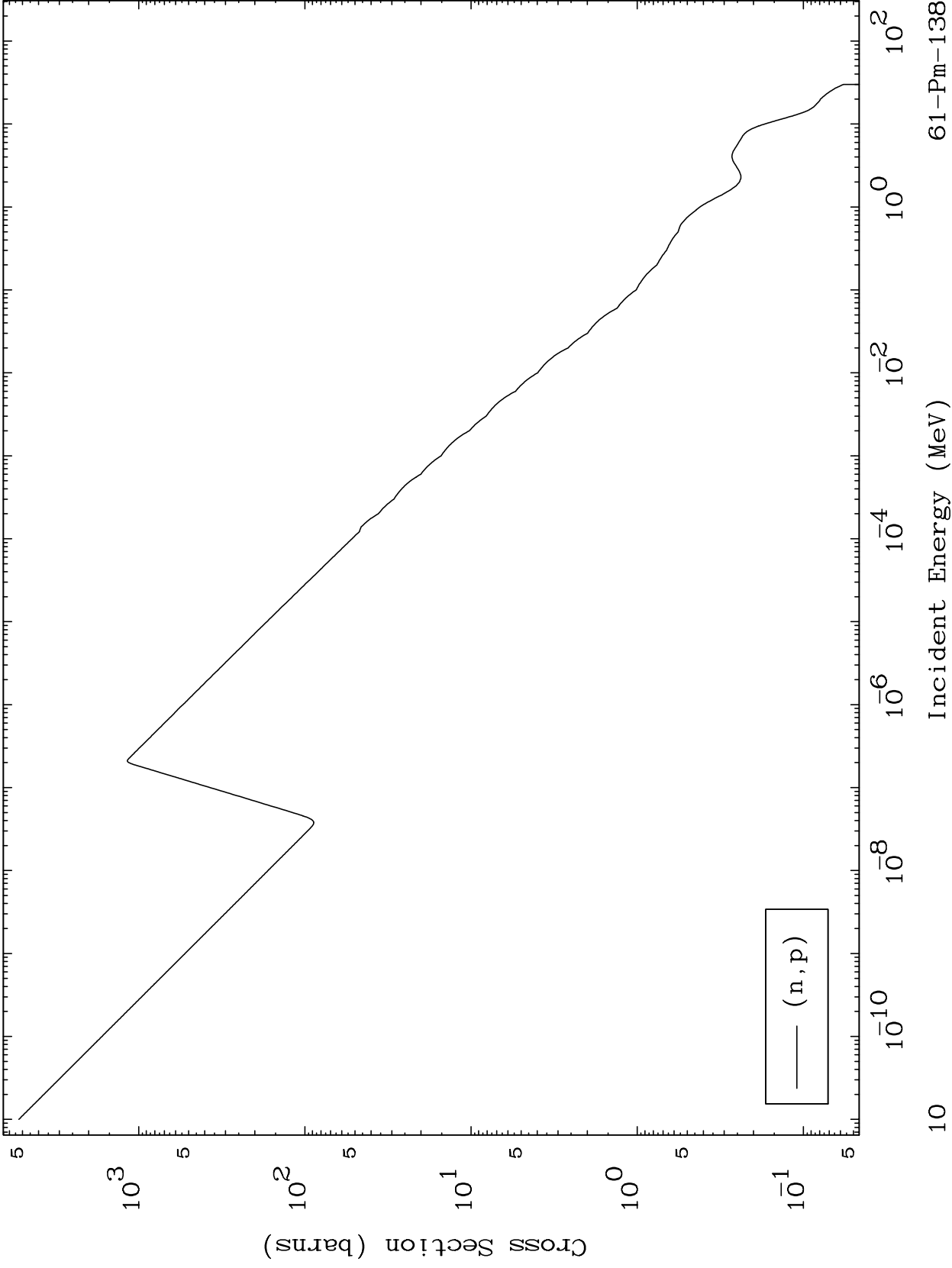
Incident Energy (MeV)

61-Pm-138

MAT 6122

(n,p) Levels
293 Kelvin Cross Sections

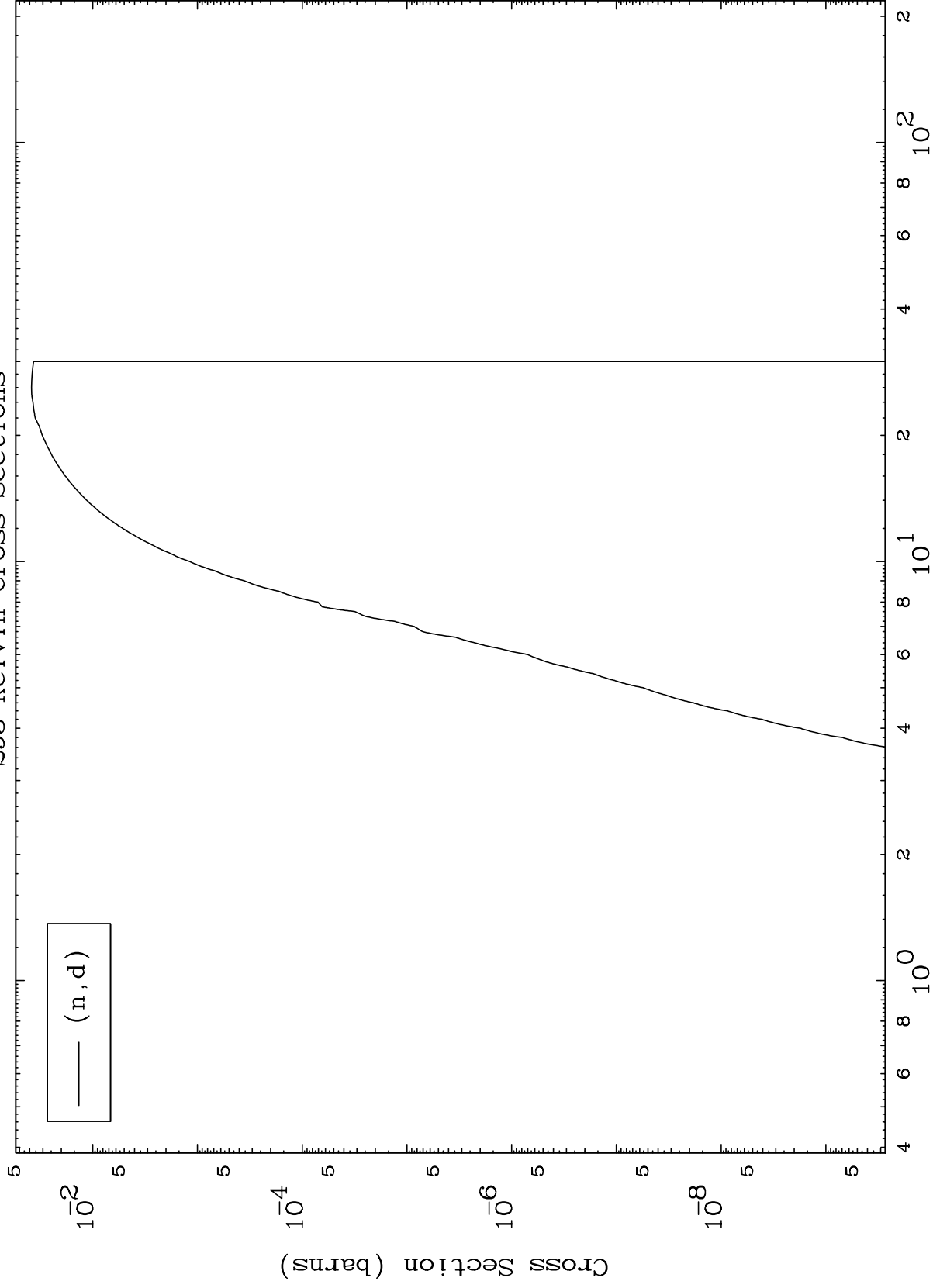
61-Pm-138



MAT 6122

(n,d) Levels
293 Kelvin Cross Sections

61-Pm-138



11

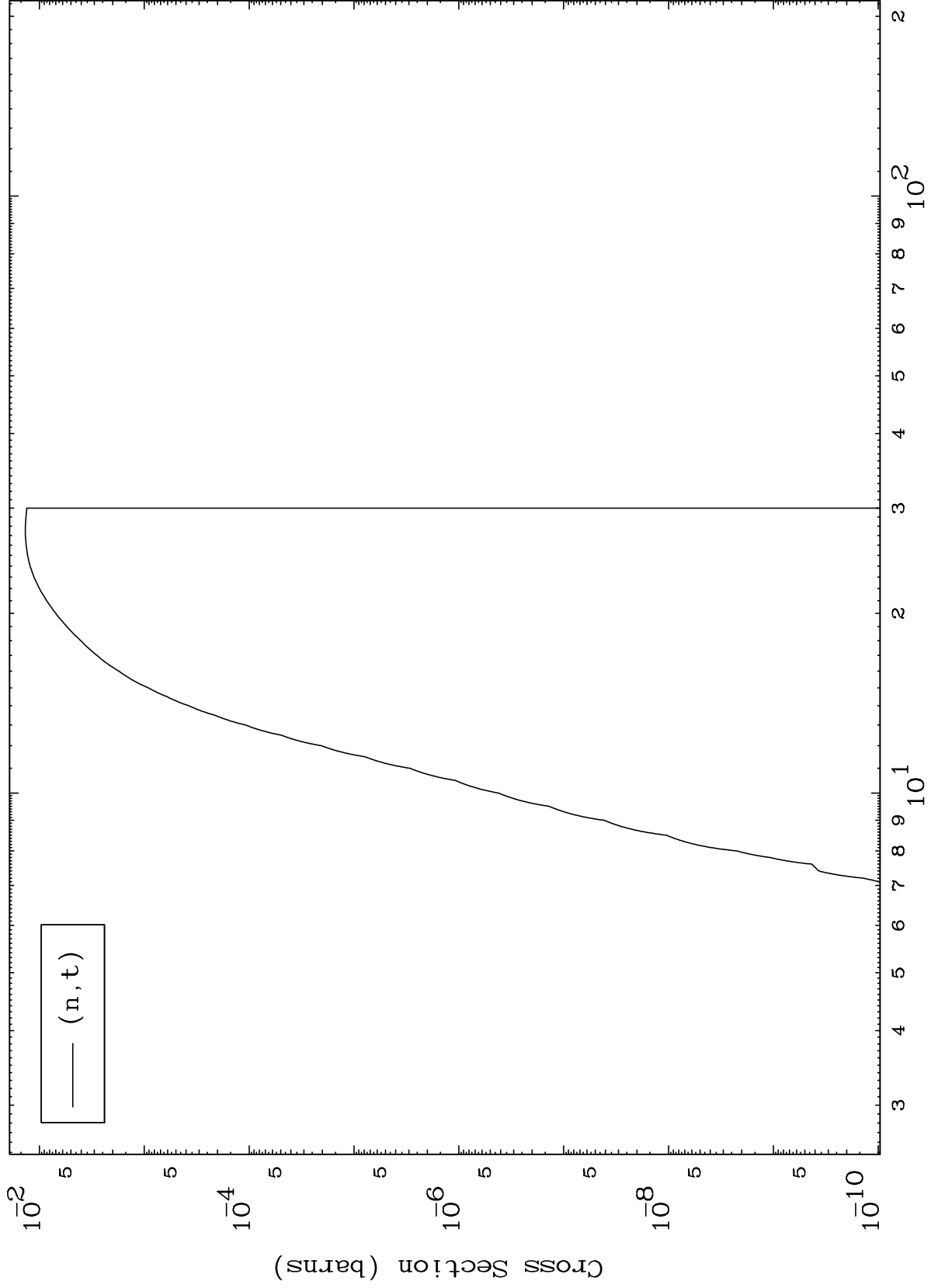
Incident Energy (MeV)

61-Pm-138

MAT 6122

(n,t) Levels
293 Kelvin Cross Sections

61-Pm-138



12

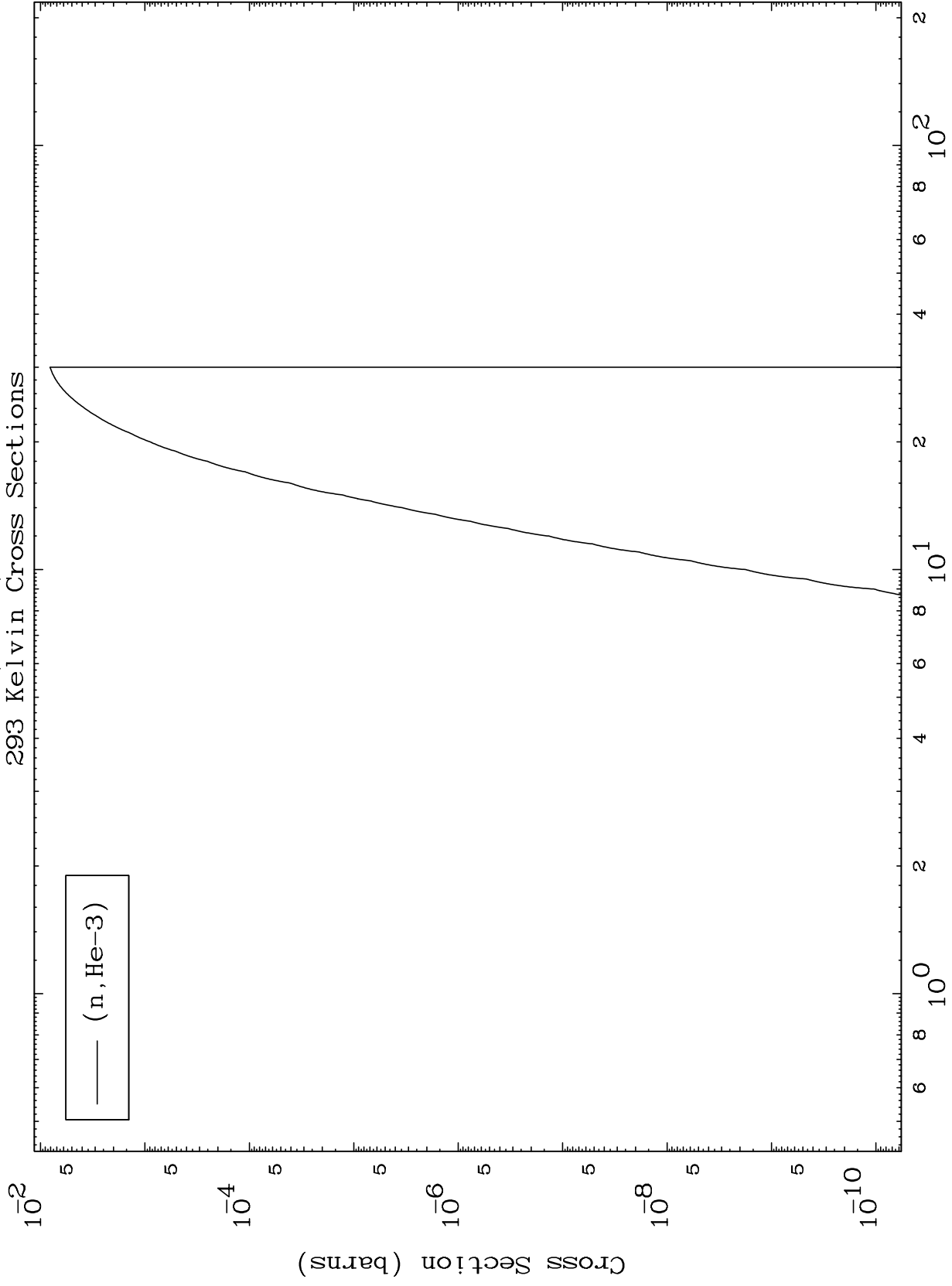
Incident Energy (MeV)

61-Pm-138

MAT 6122

(n,He3) Levels
293 Kelvin Cross Sections

61-Pm-138



13

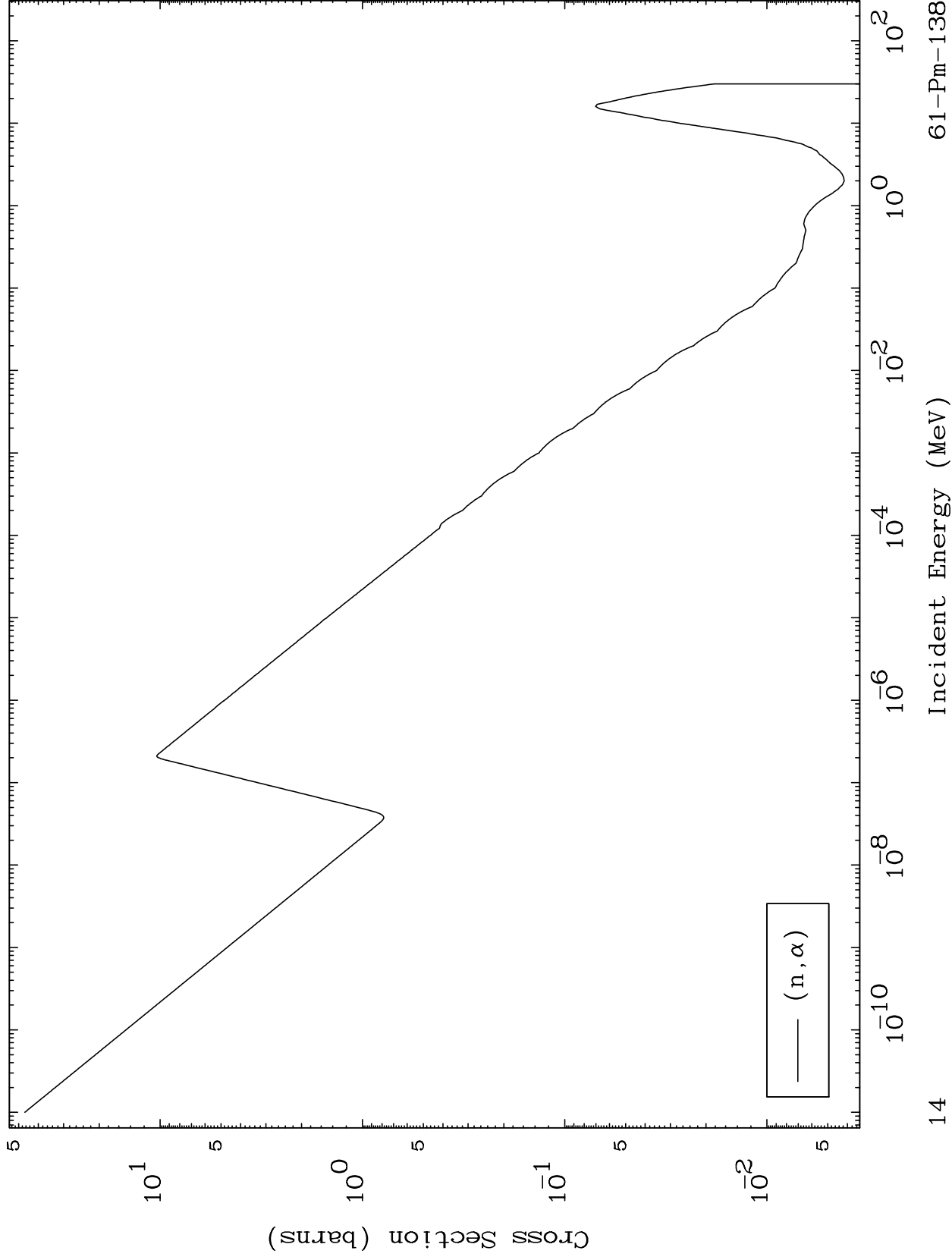
Incident Energy (MeV)

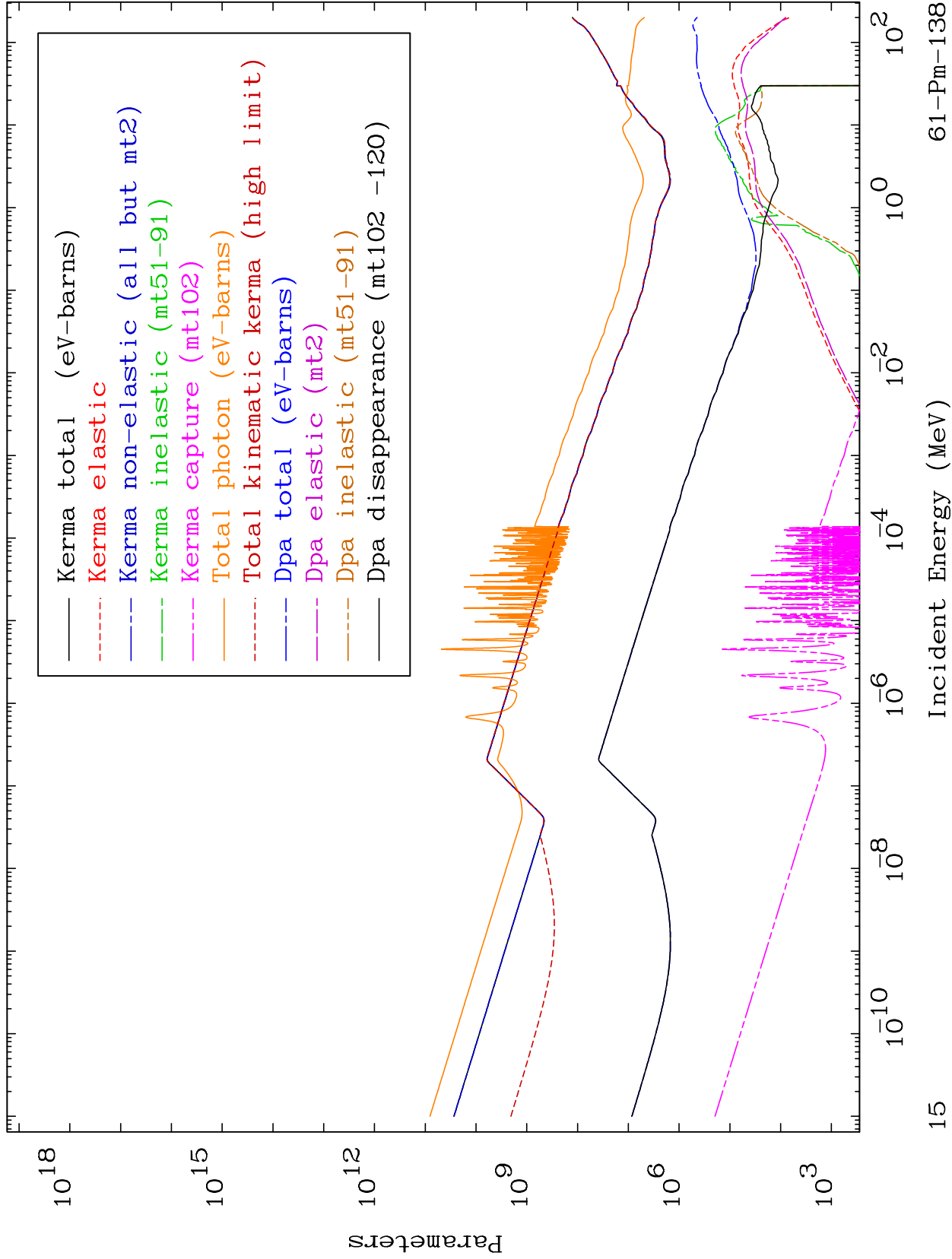
61-Pm-138

MAT 6122

(n,α) Levels
293 Kelvin Cross Sections

61-Pm-138

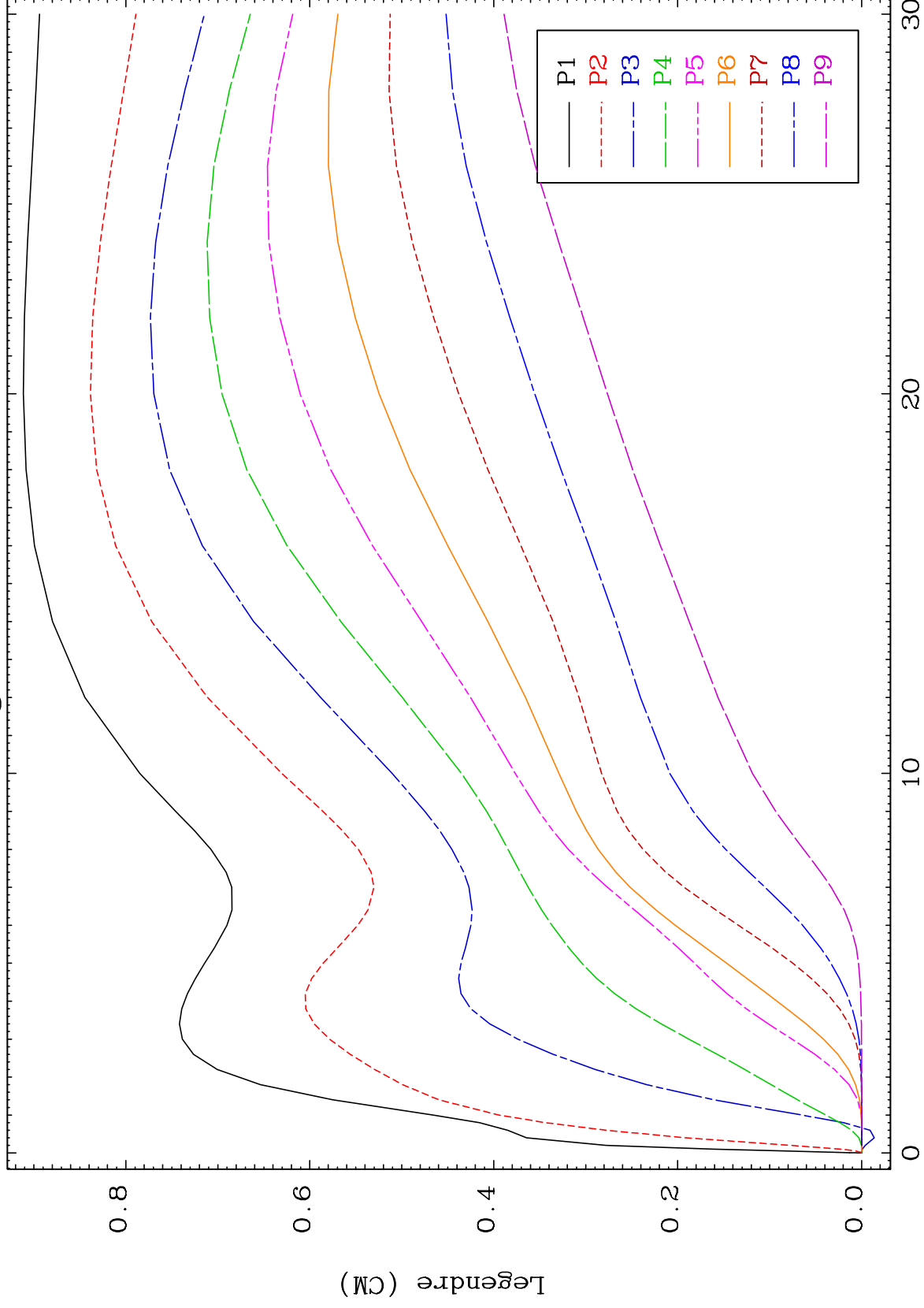




MAT 6122

Elastic Legendre Coefficients

61-Pm-138



16

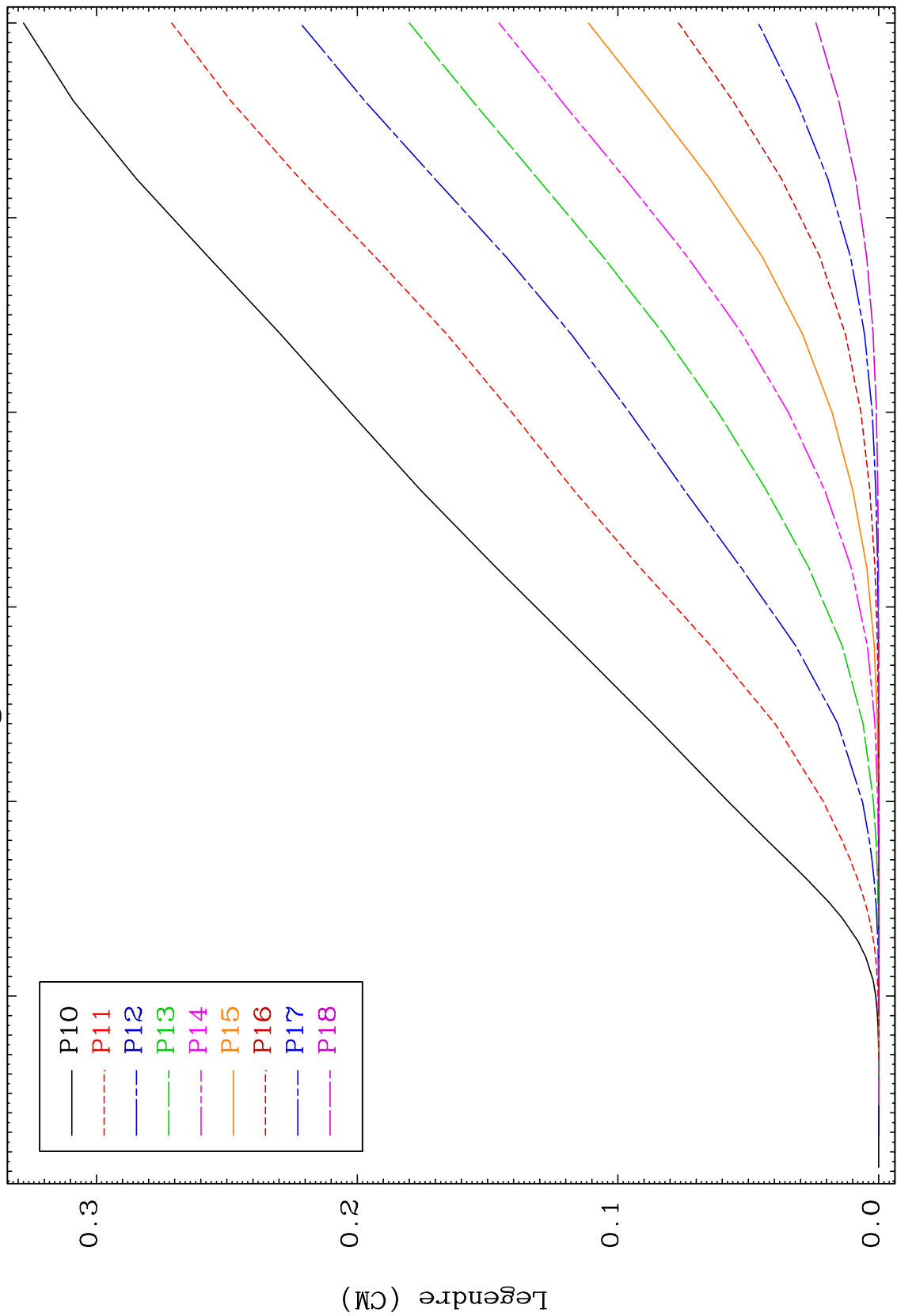
Incident Energy (MeV)

61-Pm-138

MAT 6122

Elastic Legendre Coefficients

61-Pm-138



17

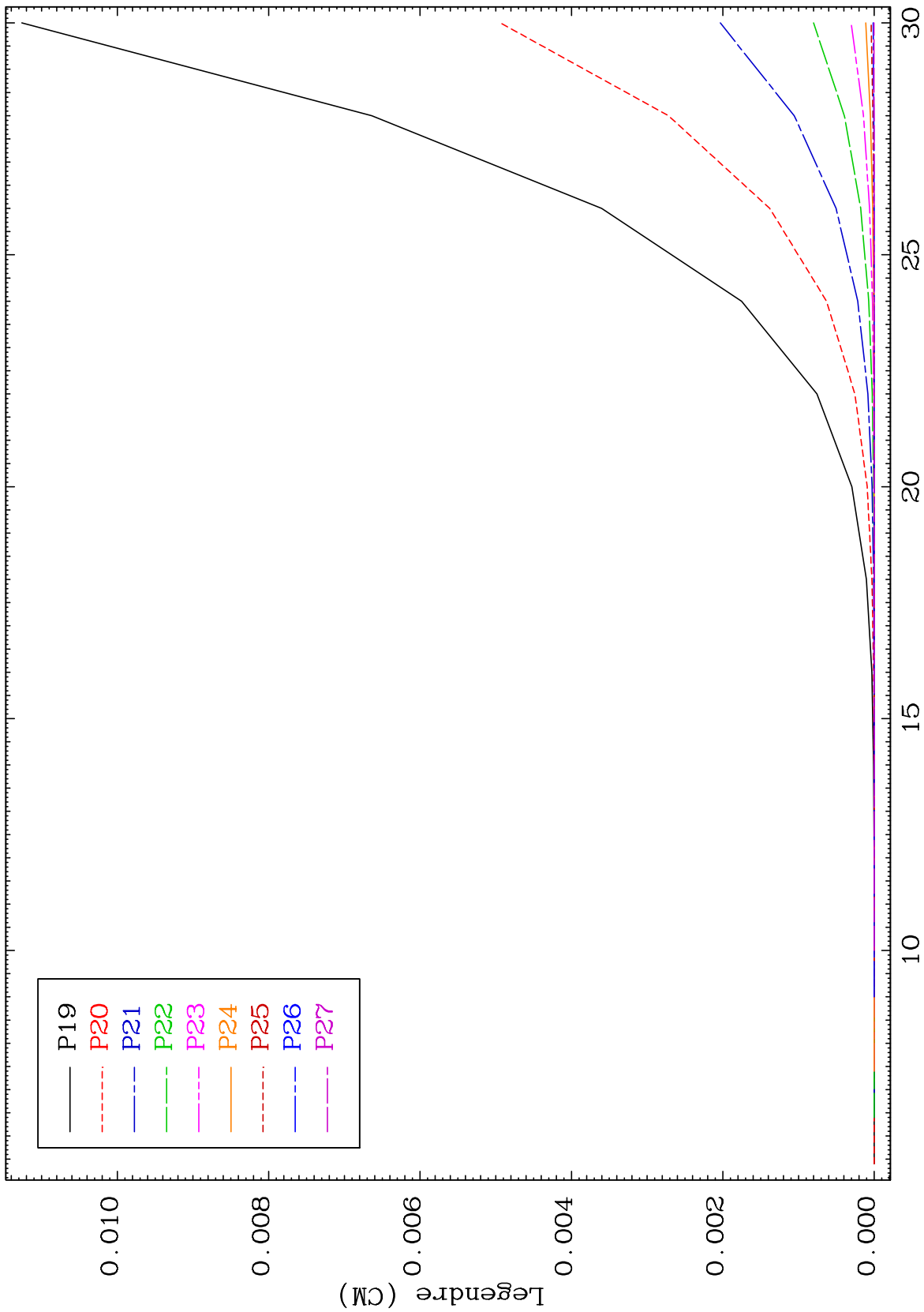
61-Pm-138

Incident Energy (MeV)

MAT 6122

Elastic Legendre Coefficients

61-Pm-138



18

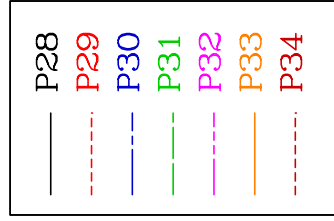
Incident Energy (MeV)

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

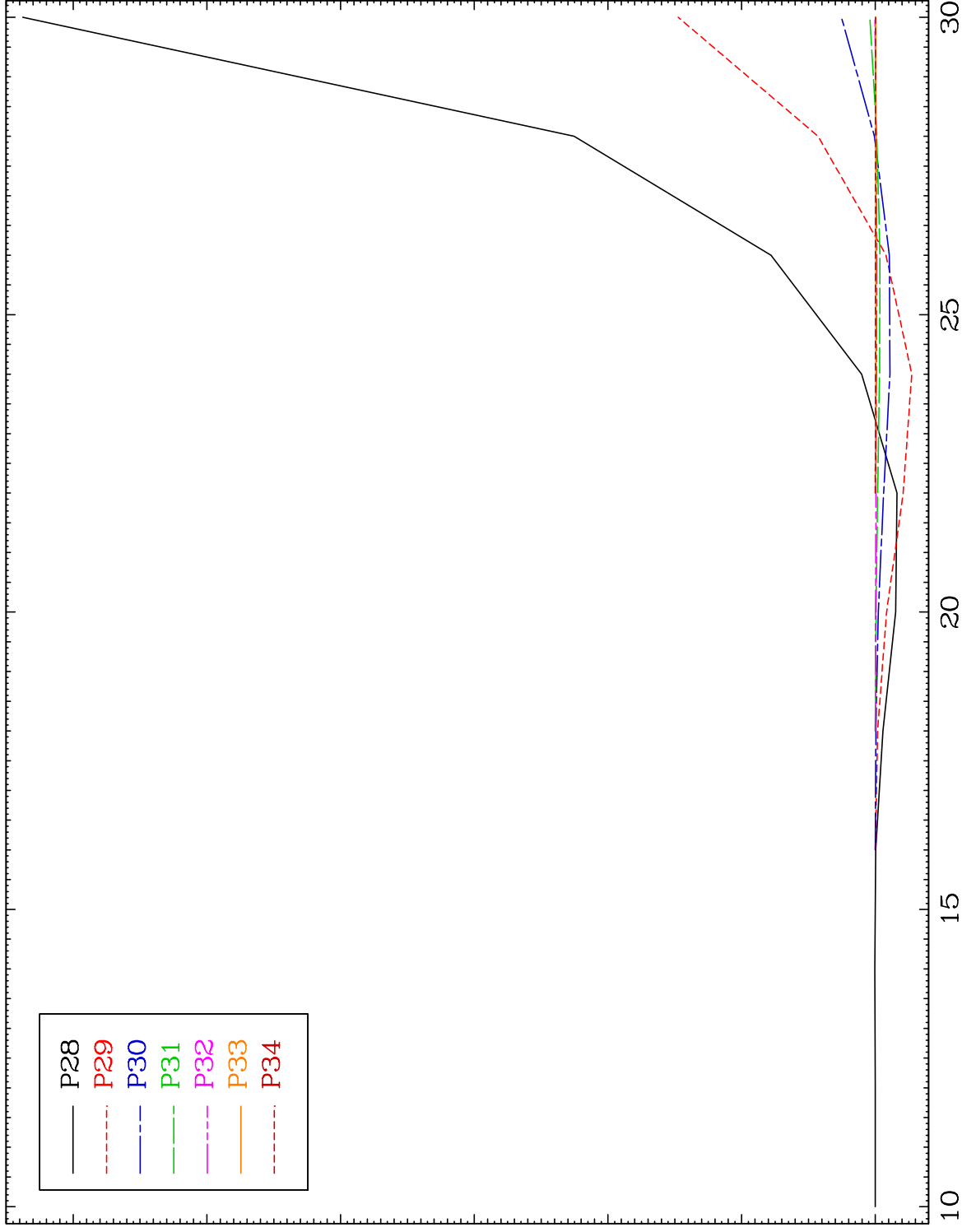
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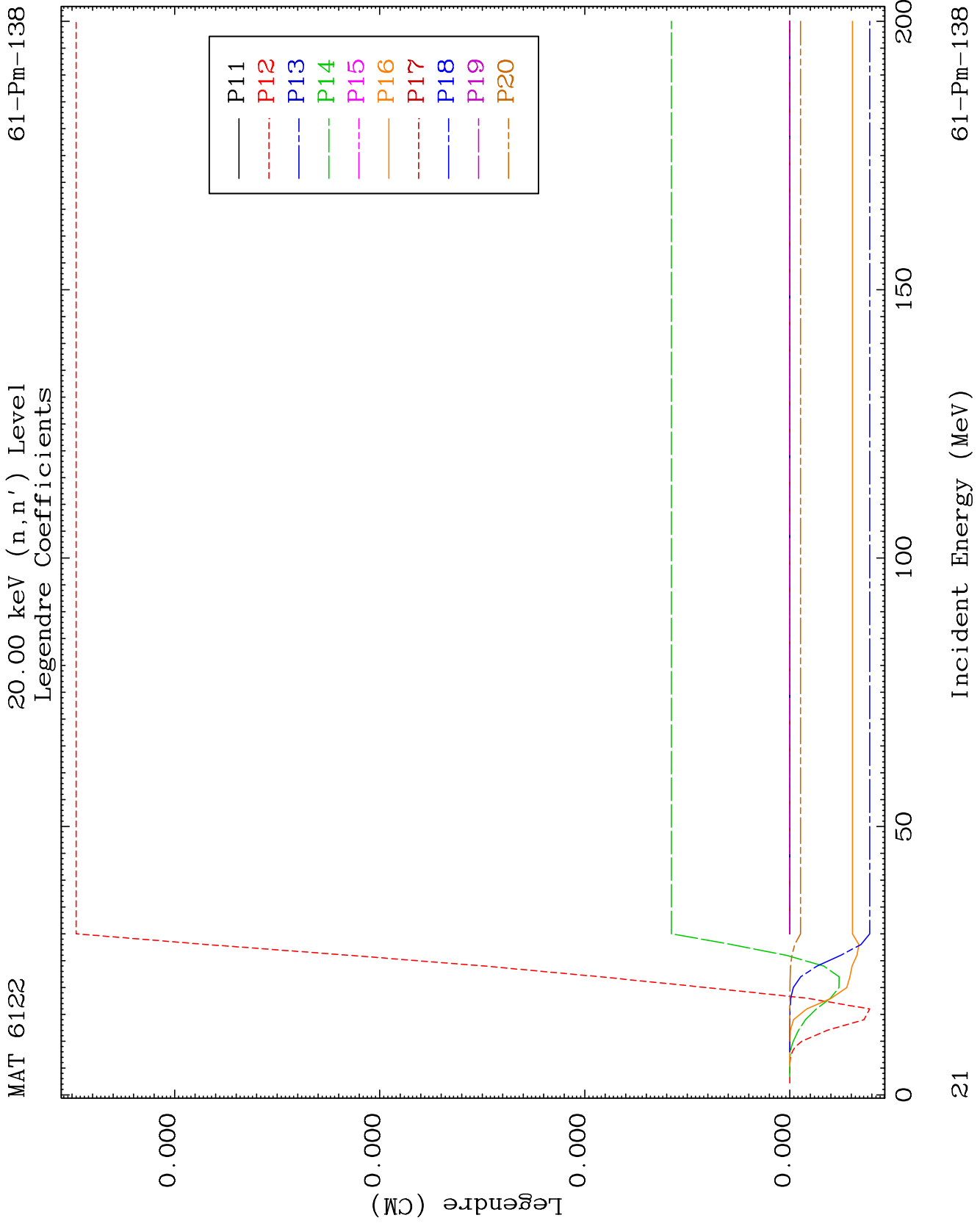
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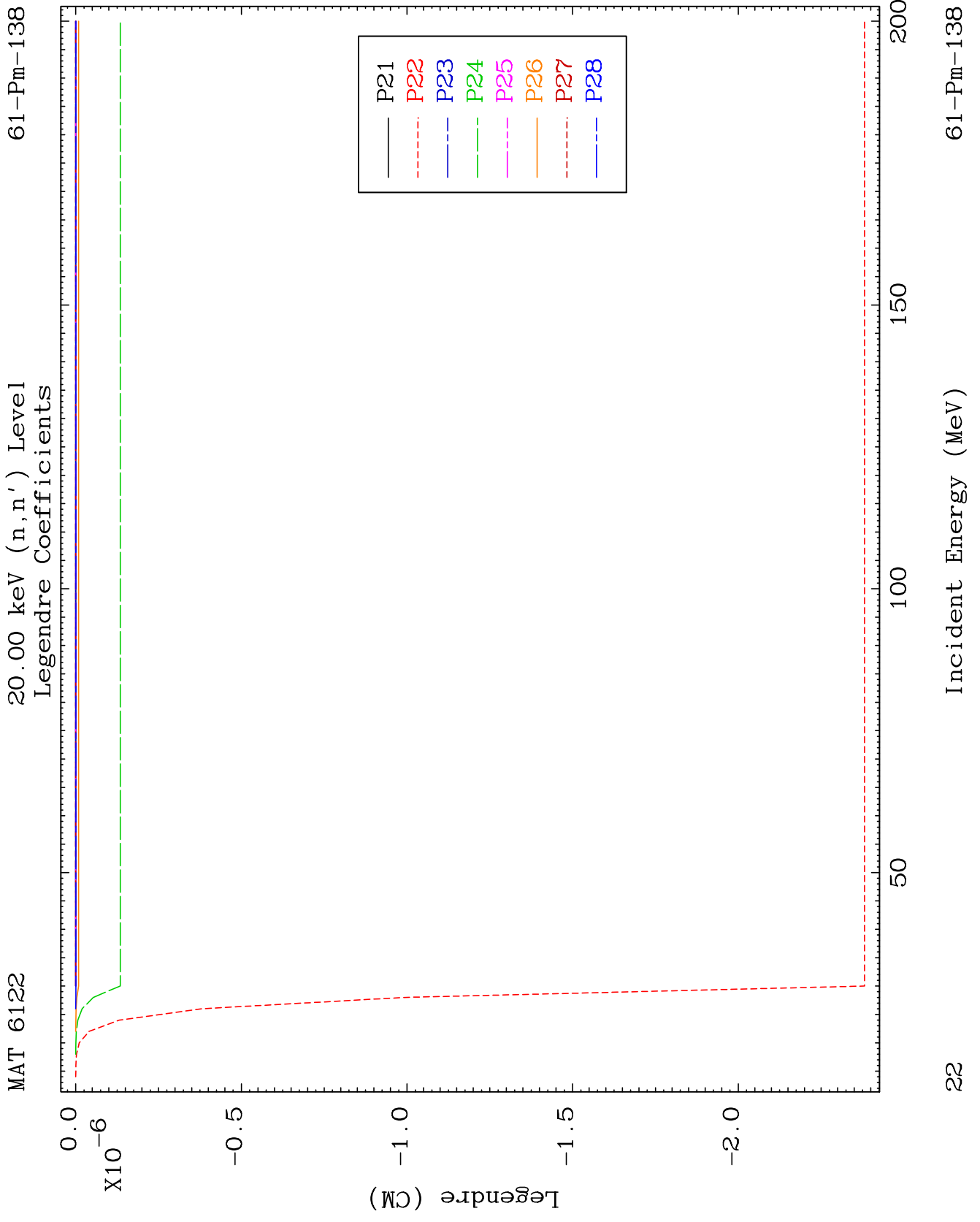
19

Incident Energy (MeV)

61-Pm-138



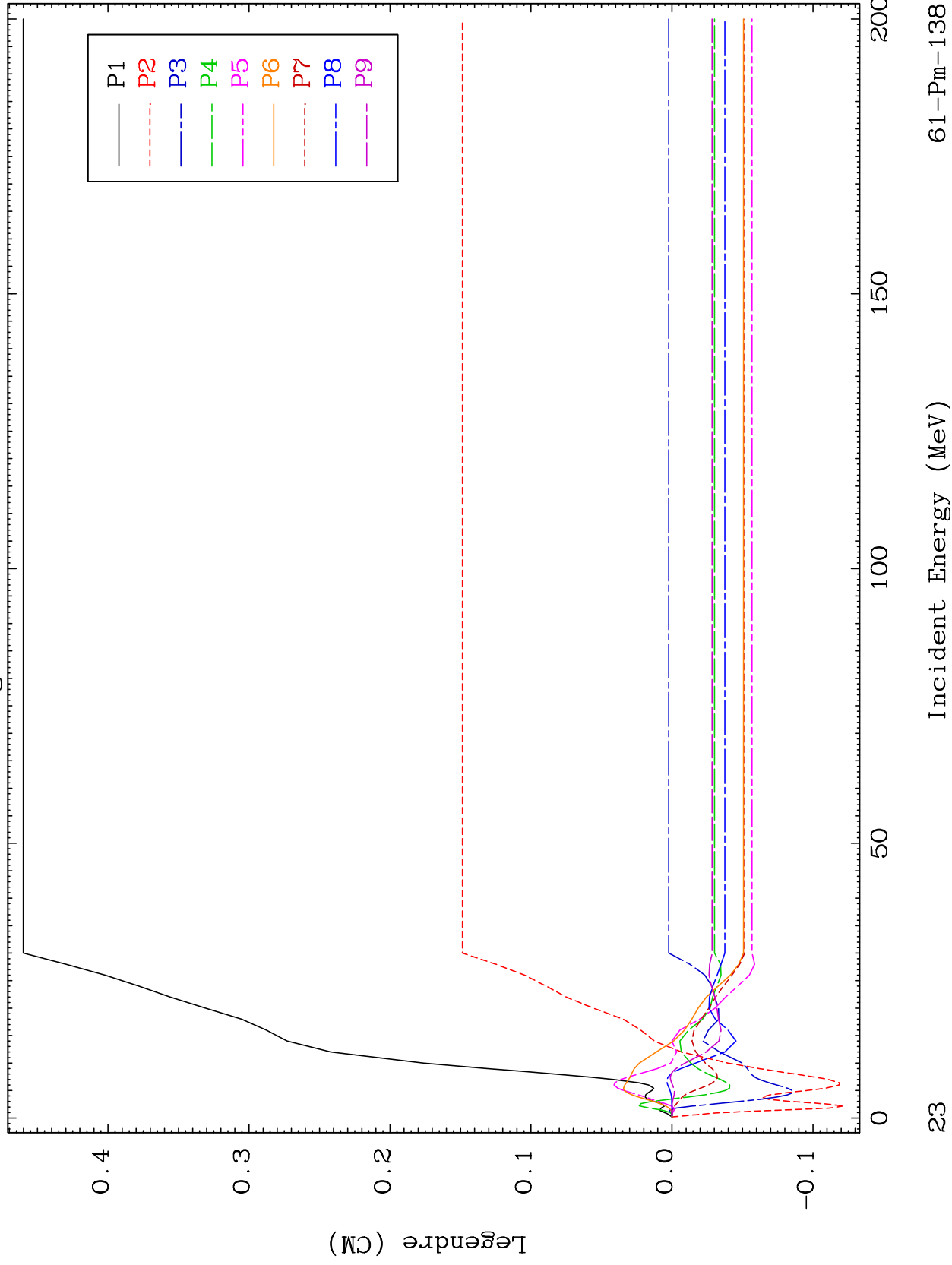




MAT 6122

163.1 keV (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

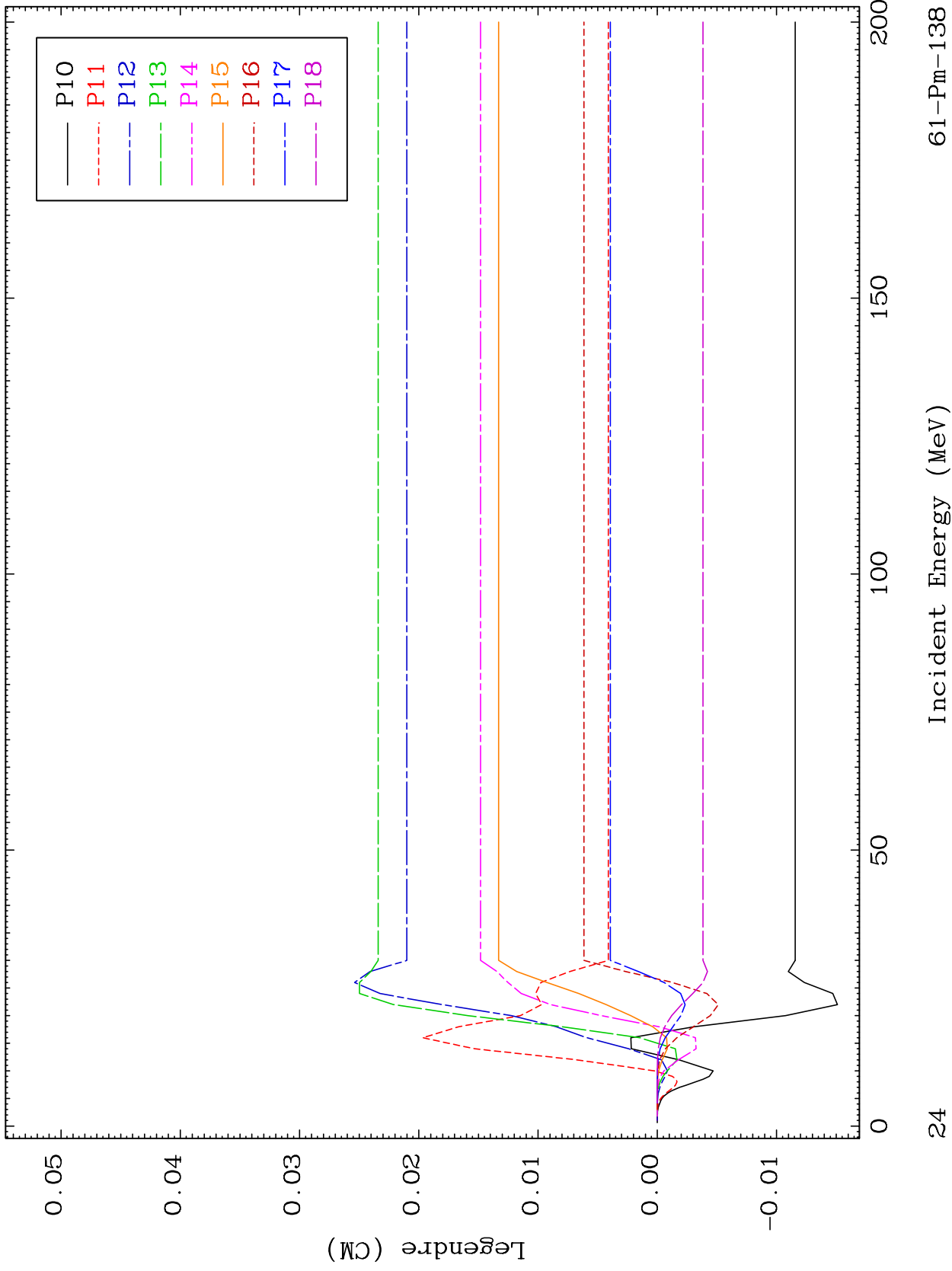
Incident Energy (MeV)

23

MAT 6122

163.1 keV (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

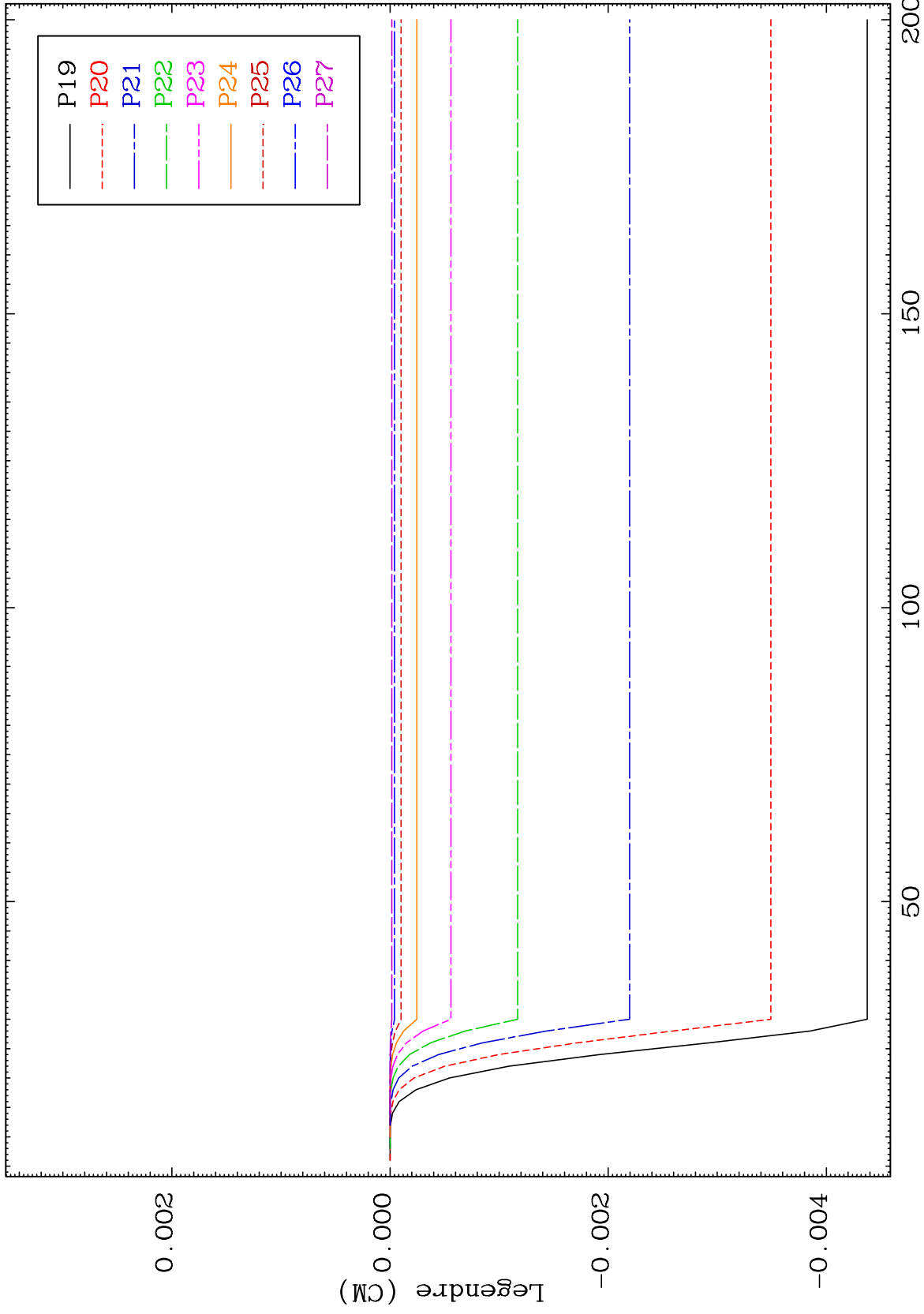
Incident Energy (MeV)

24

MAT 6122

163.1 keV (n,n') Level
Legendre Coefficients

61-Pm-138



25

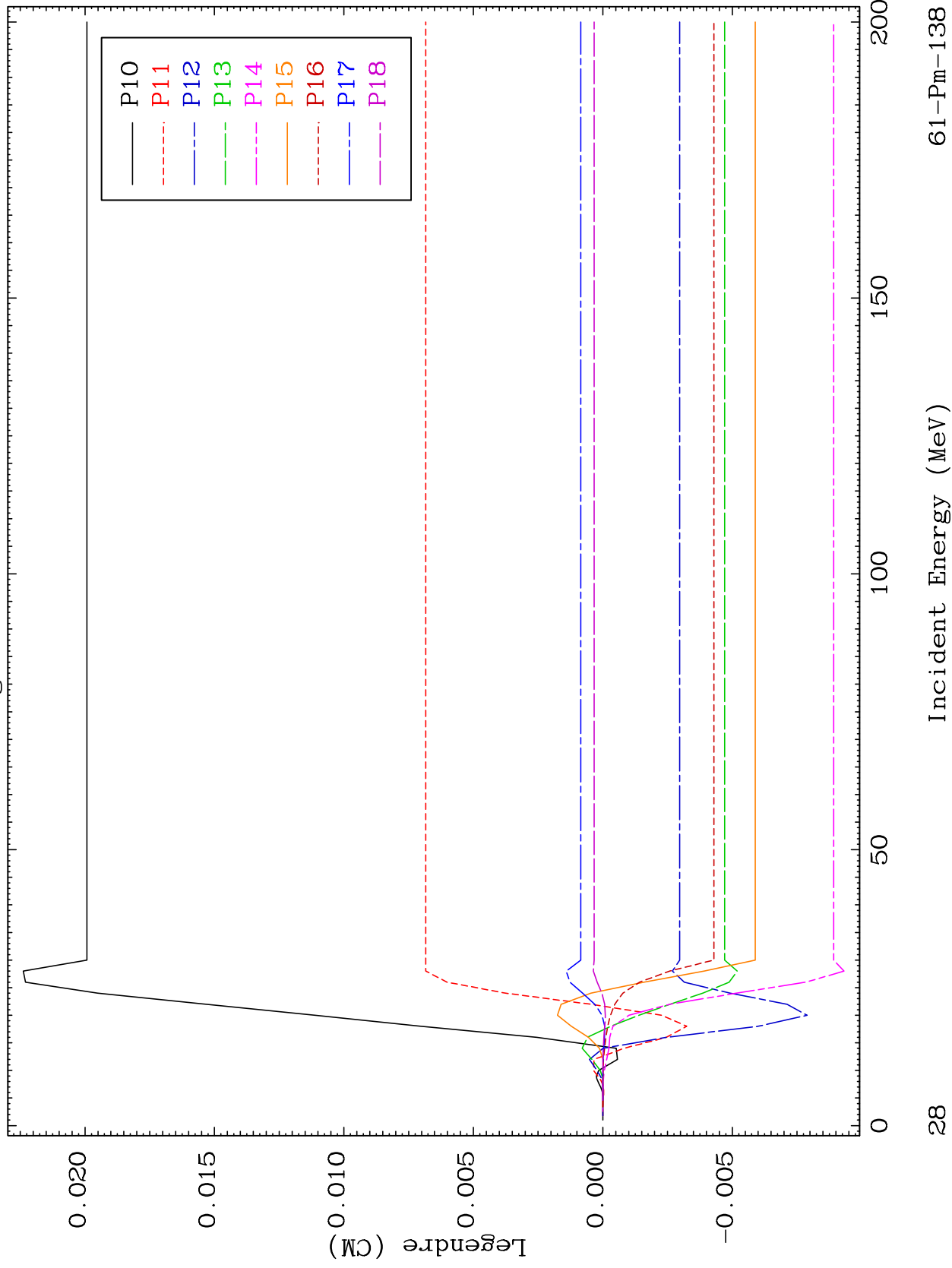
Incident Energy (MeV)

61-Pm-138

MAT 6122

202.0 keV (n,n') Level
Legendre Coefficients

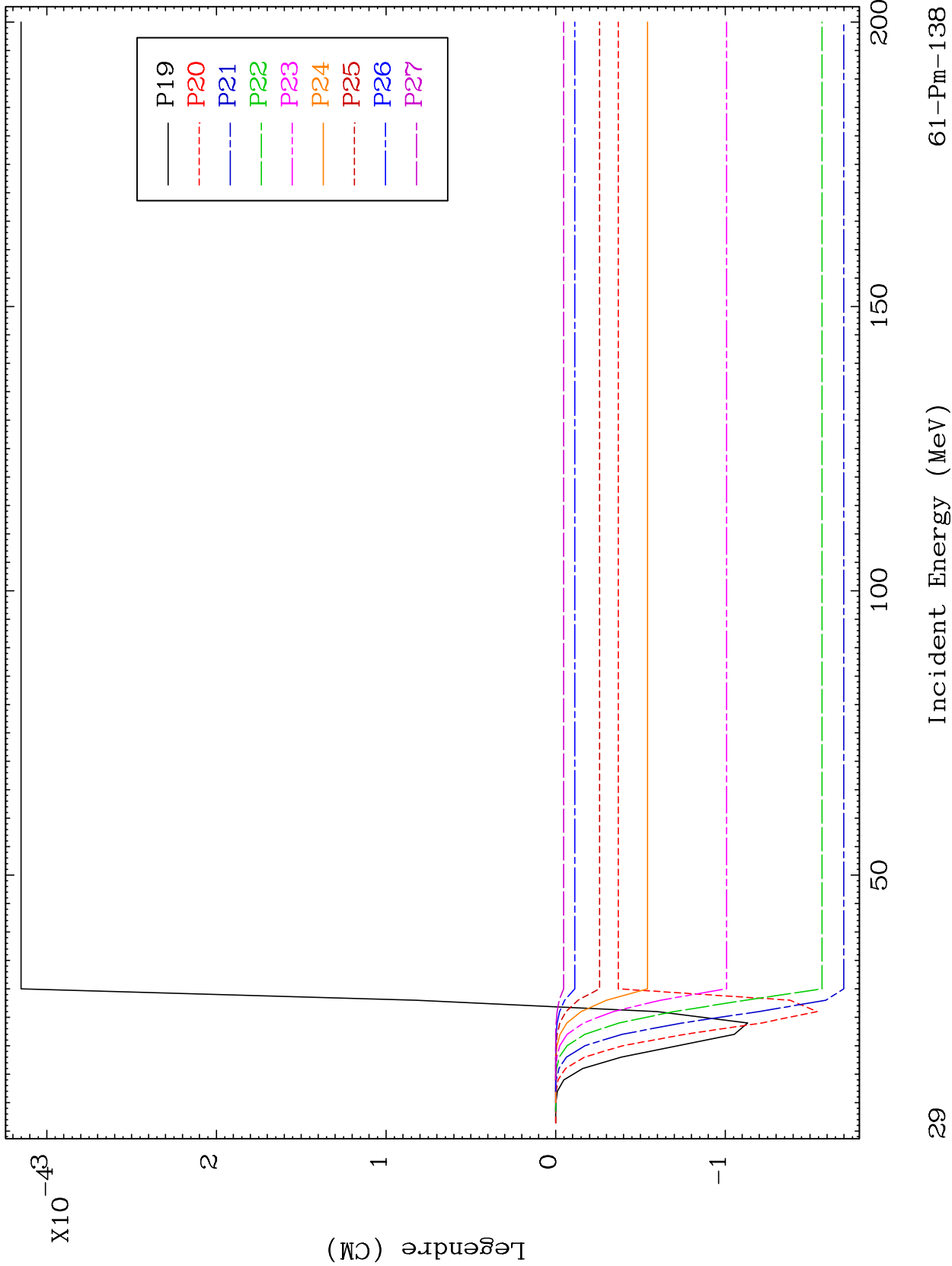
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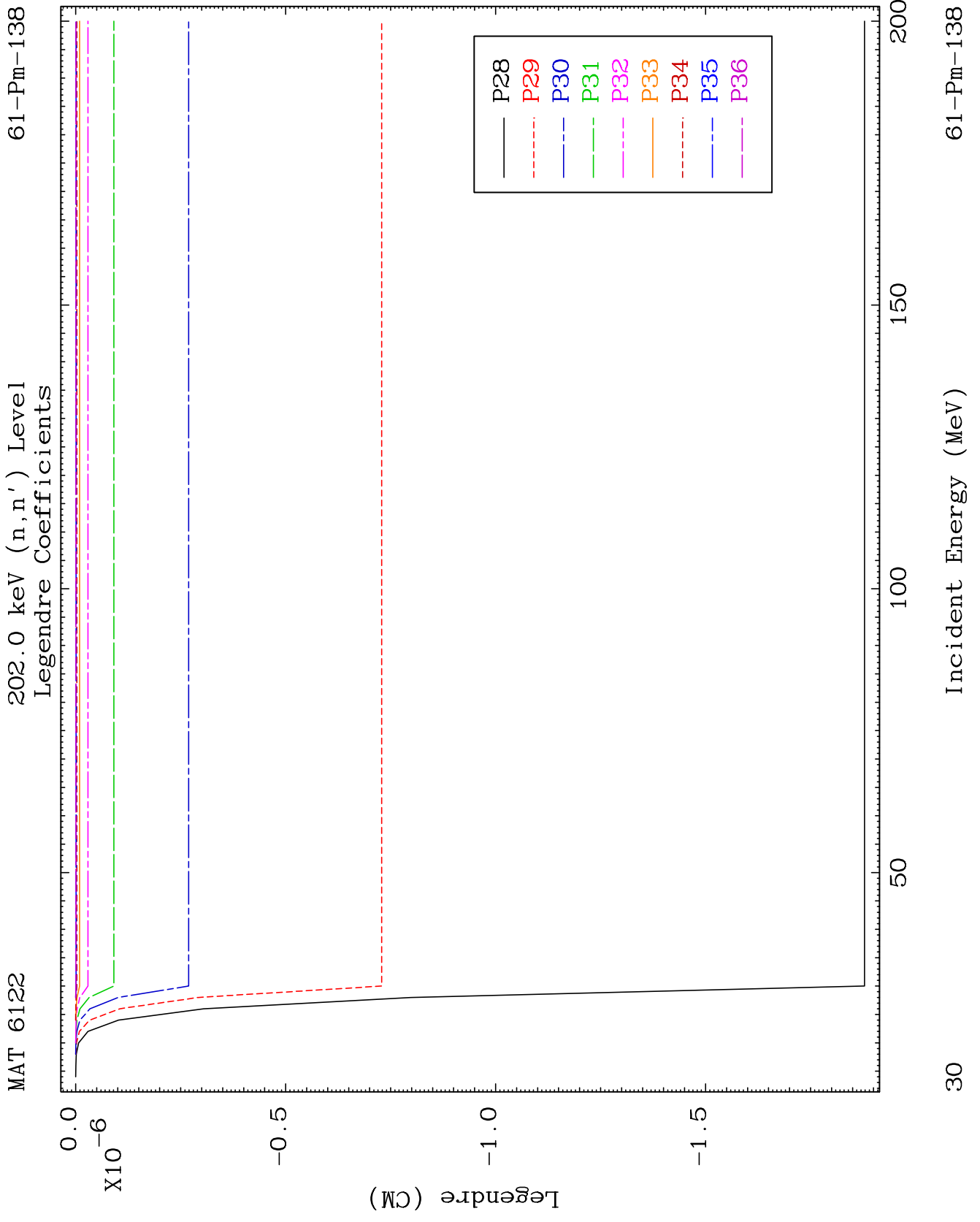


61-Pm-138

Incident Energy (MeV)

28

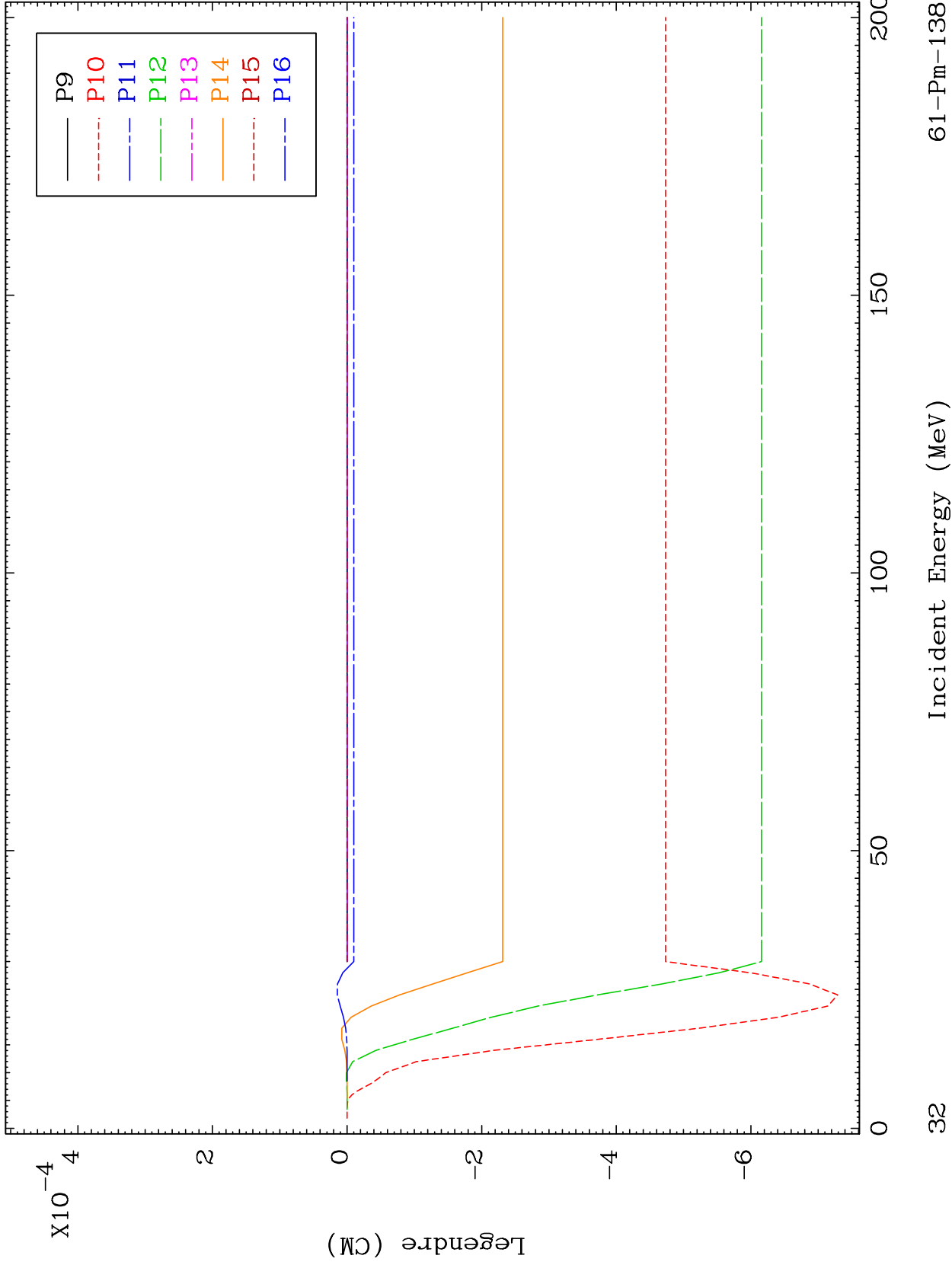




MAT 6122

259.5 keV (n,n') Level
Legendre Coefficients

61-Pm-138



32

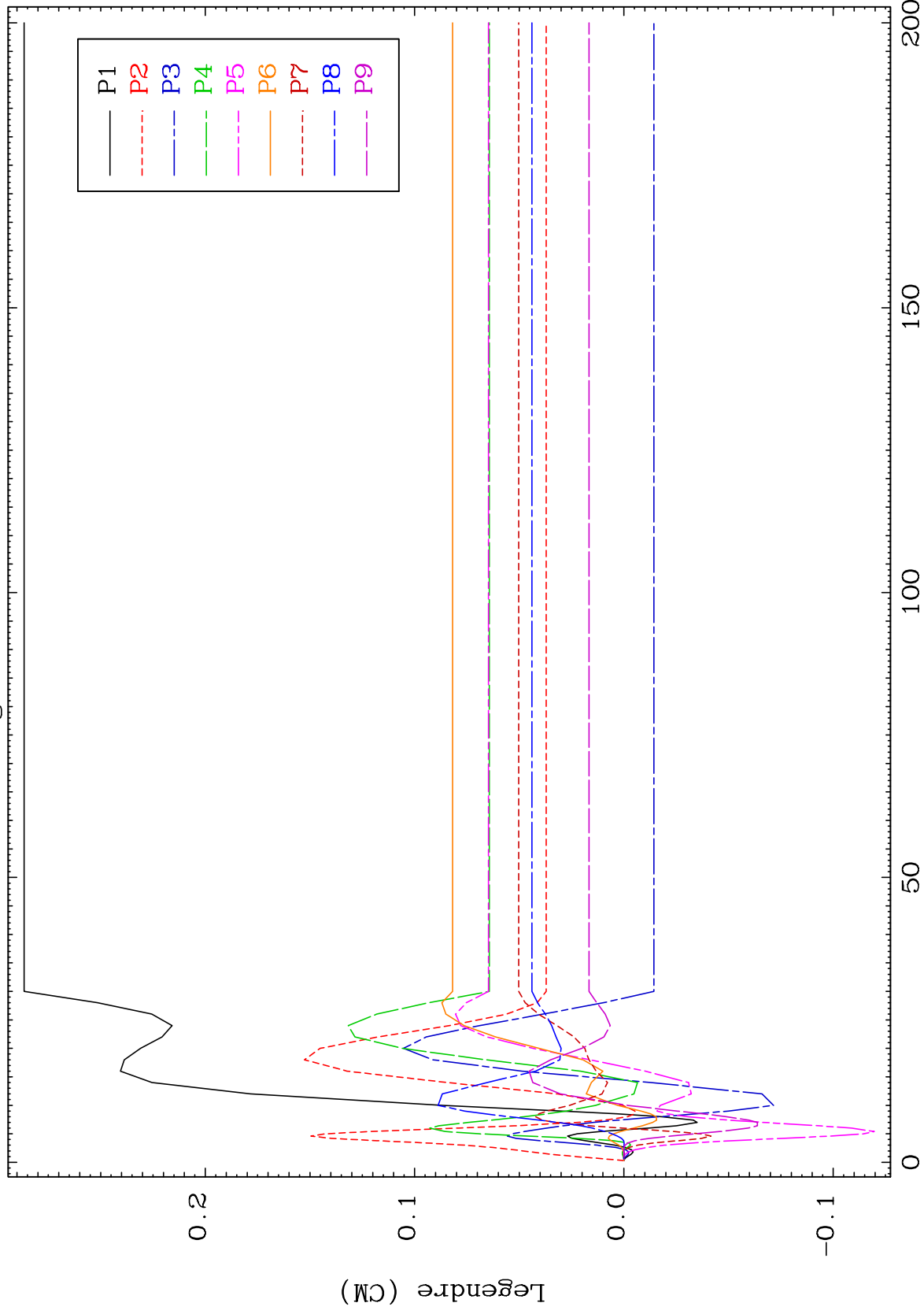
Incident Energy (MeV)

61-Pm-138

MAT 6122

273.8 keV (n, n') Level
Legendre Coefficients

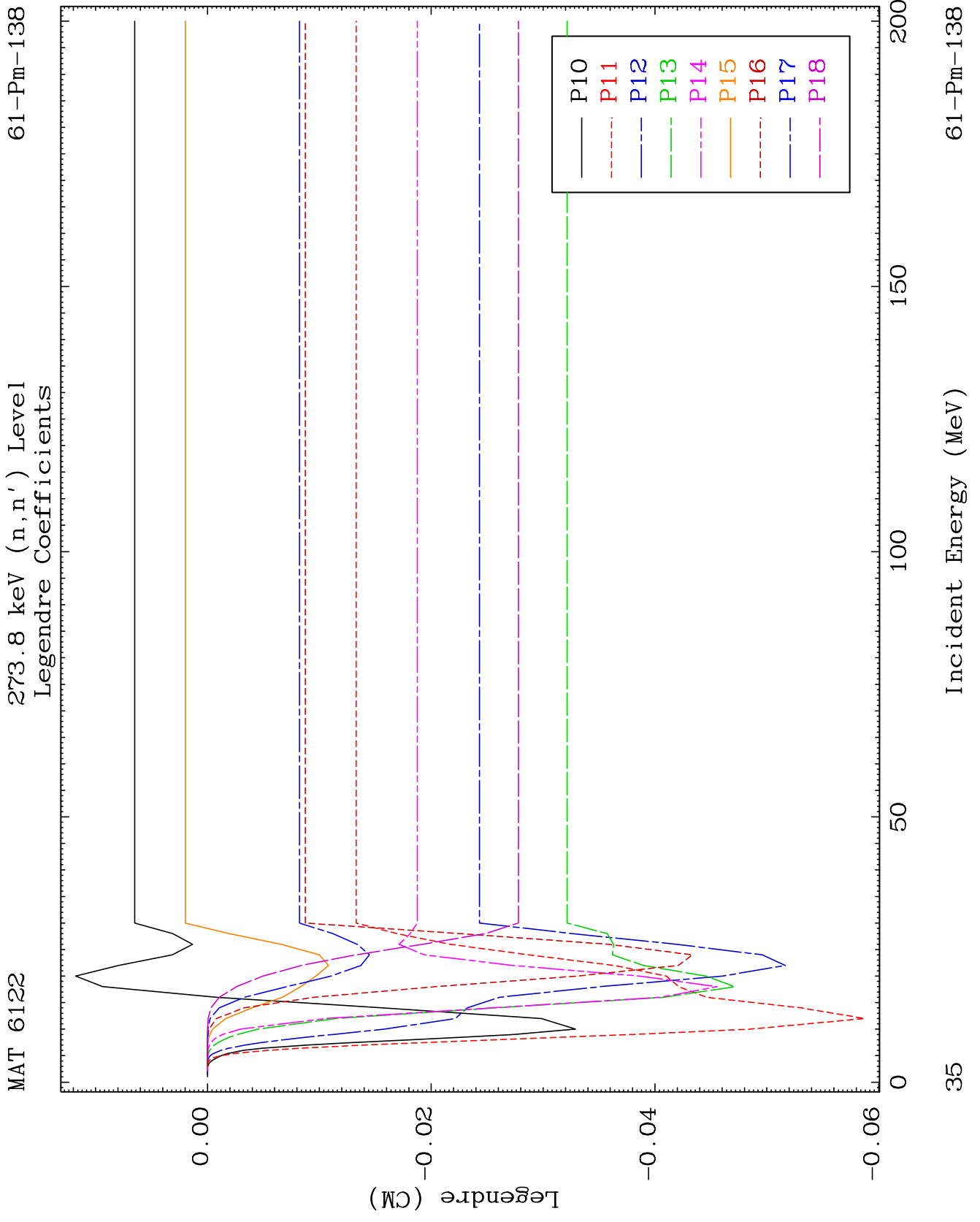
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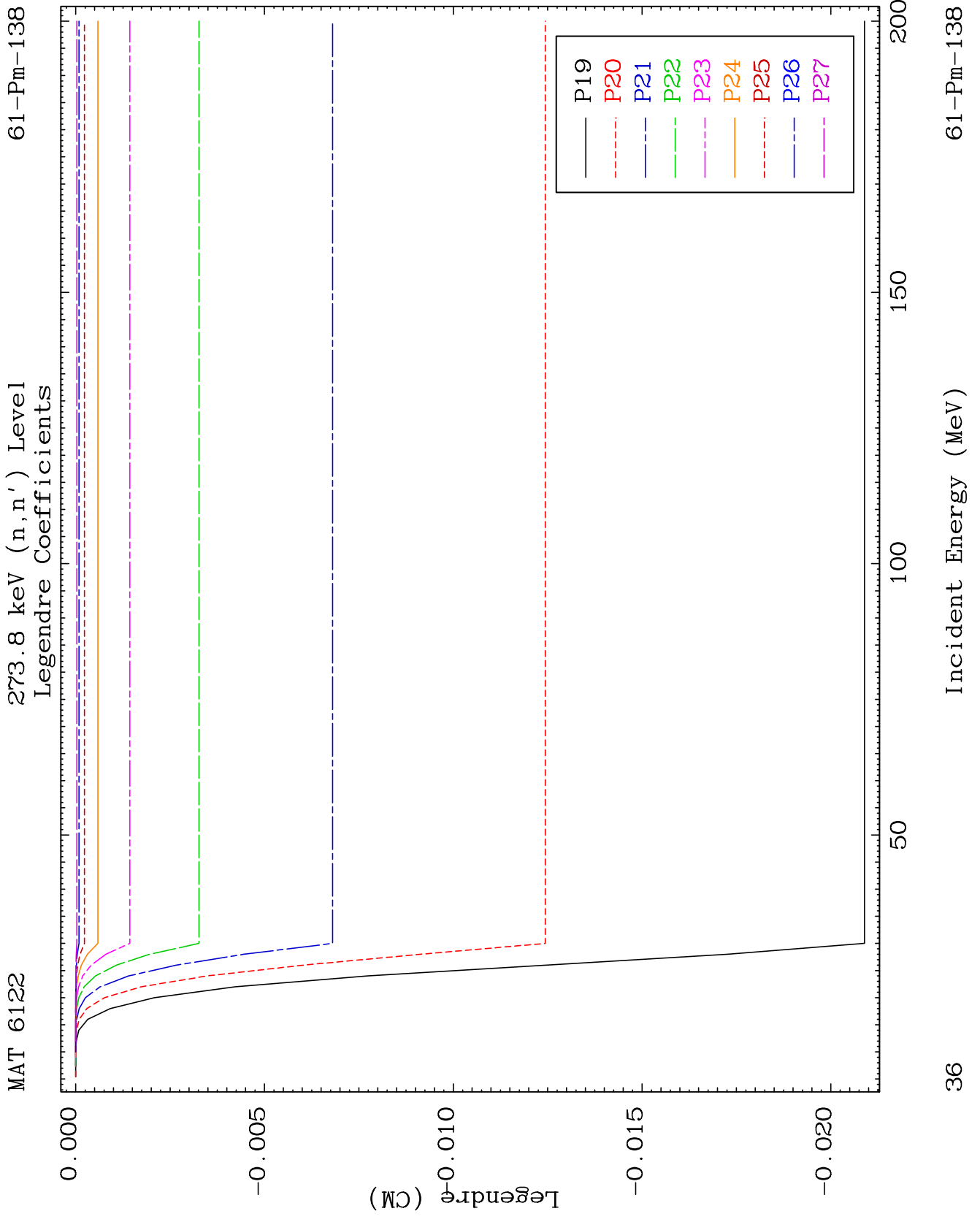


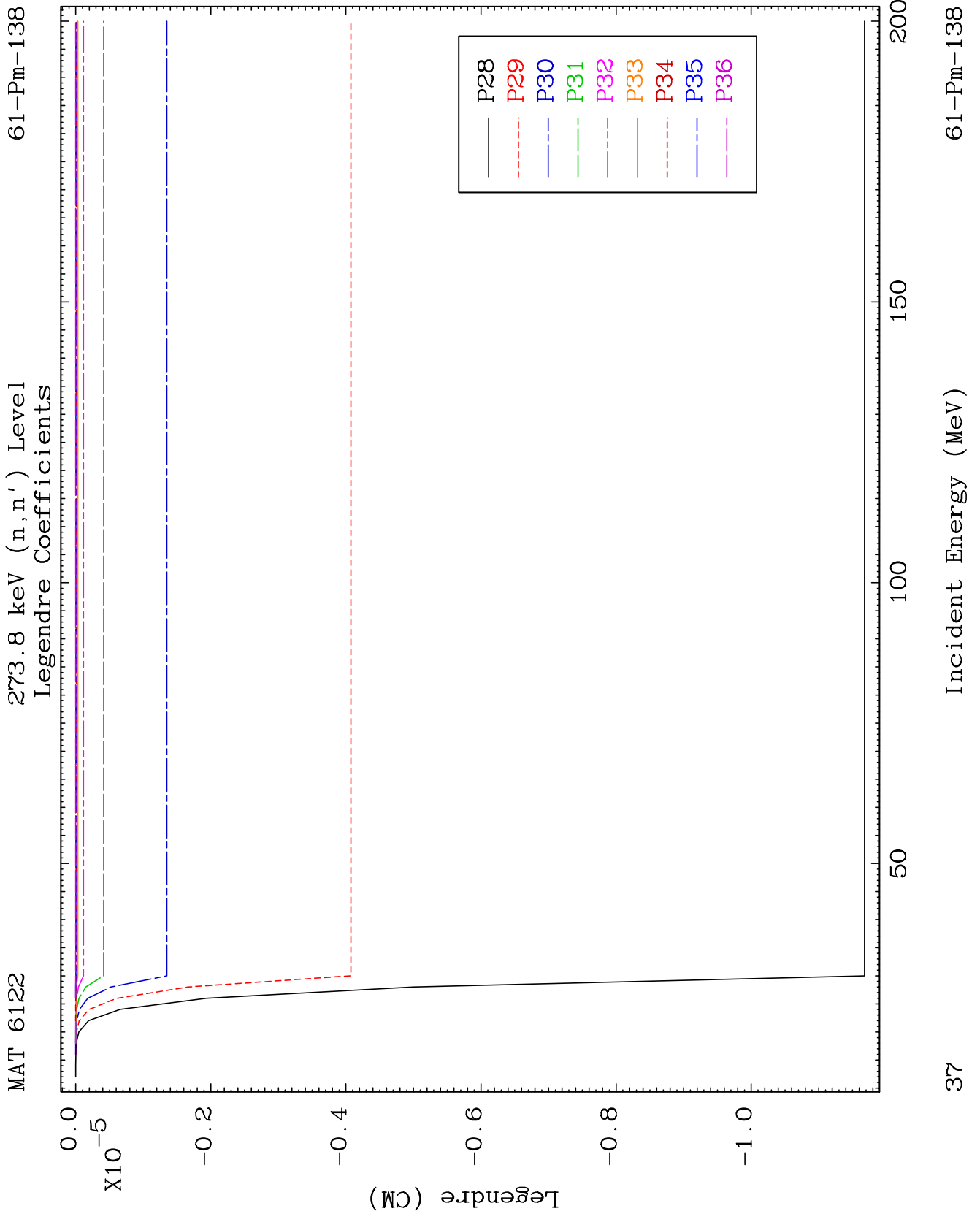
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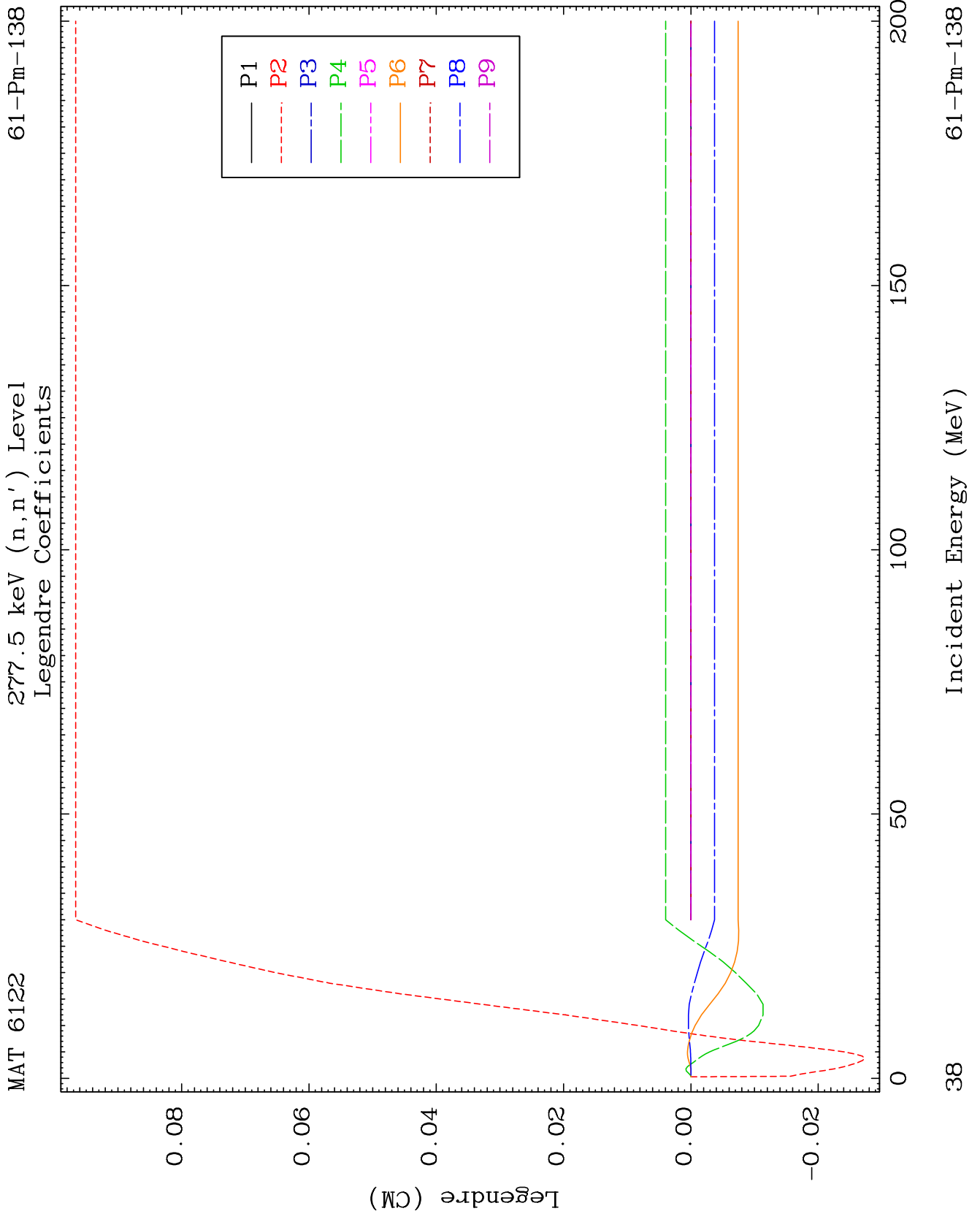
Incident Energy (MeV)

61-Pm-138





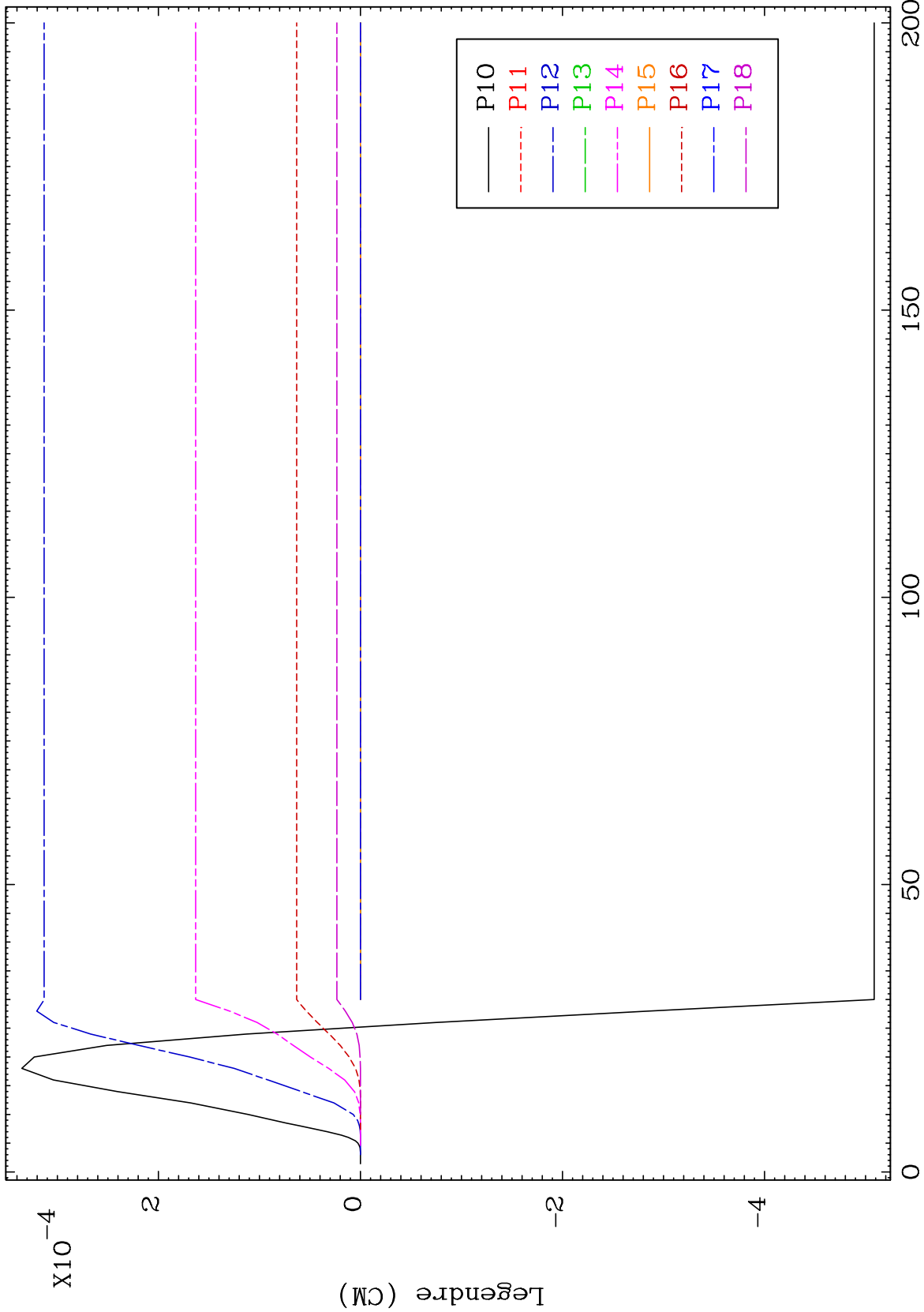




MAT 6122

277.5 keV (n,n') Level
Legendre Coefficients

61-Pm-138



39

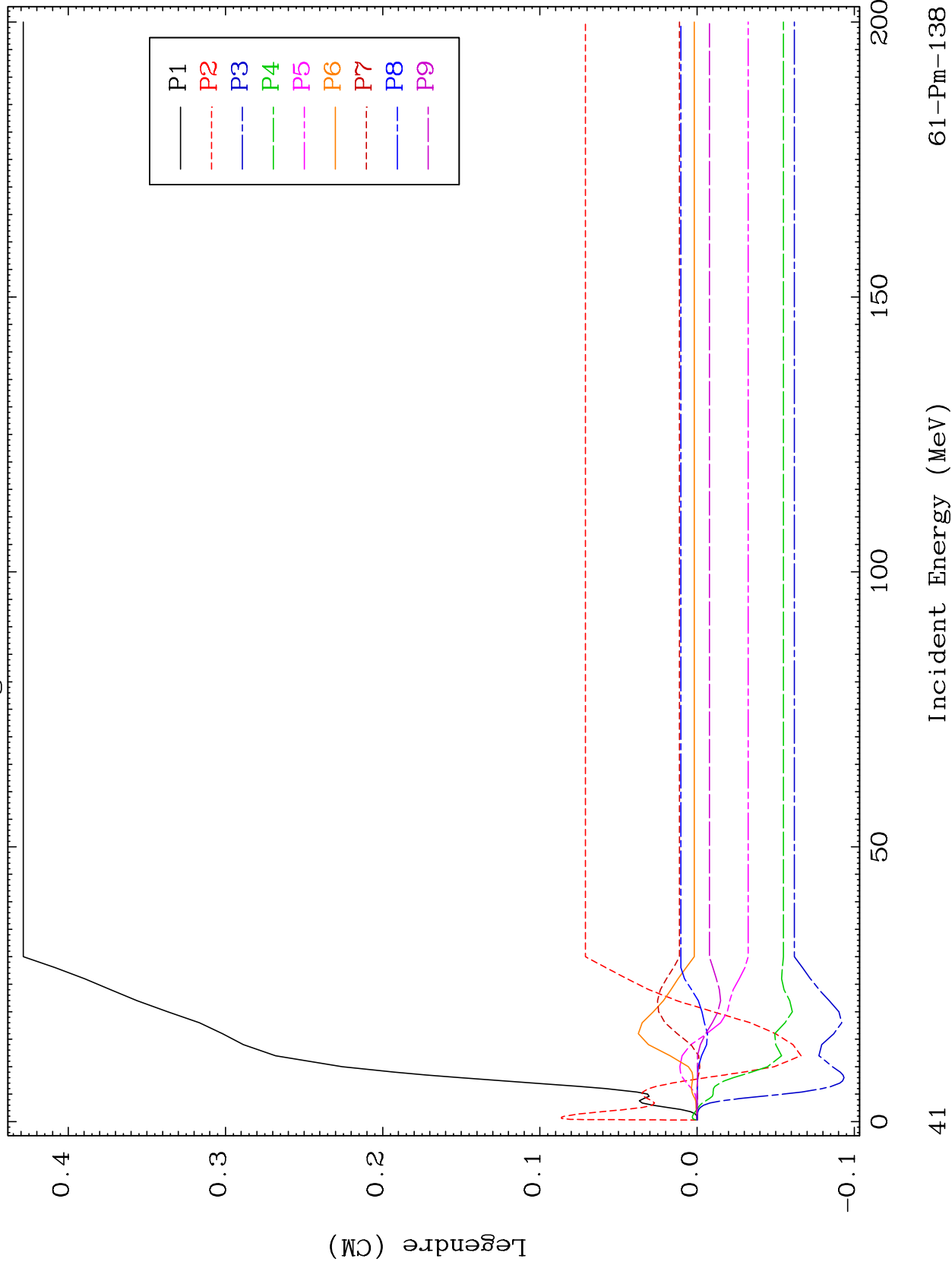
Incident Energy (MeV)

61-Pm-138

MAT 6122

285.4 keV (n, n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

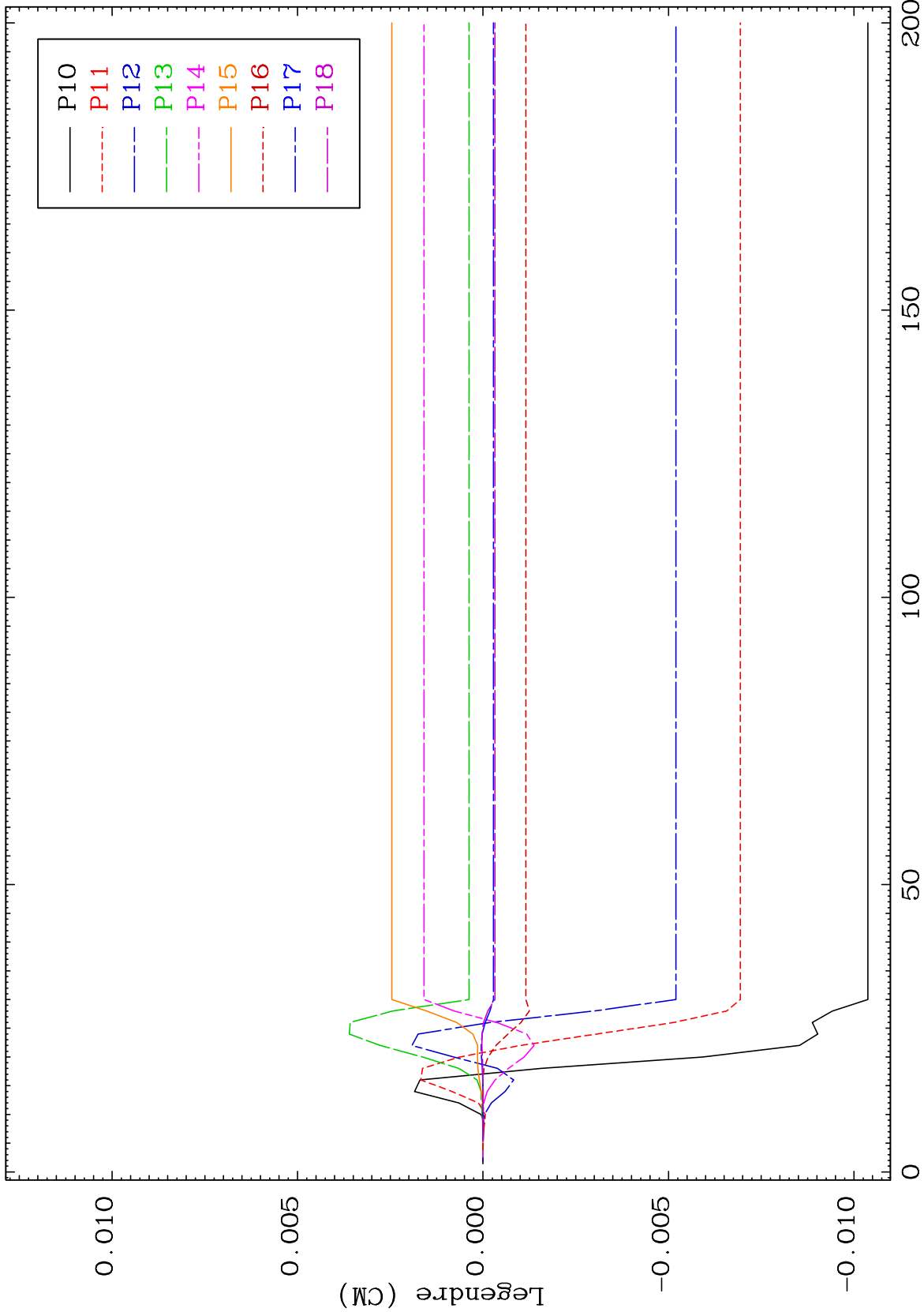
Incident Energy (MeV)

41

MAT 6122

285.4 keV (n,n') Level
Legendre Coefficients

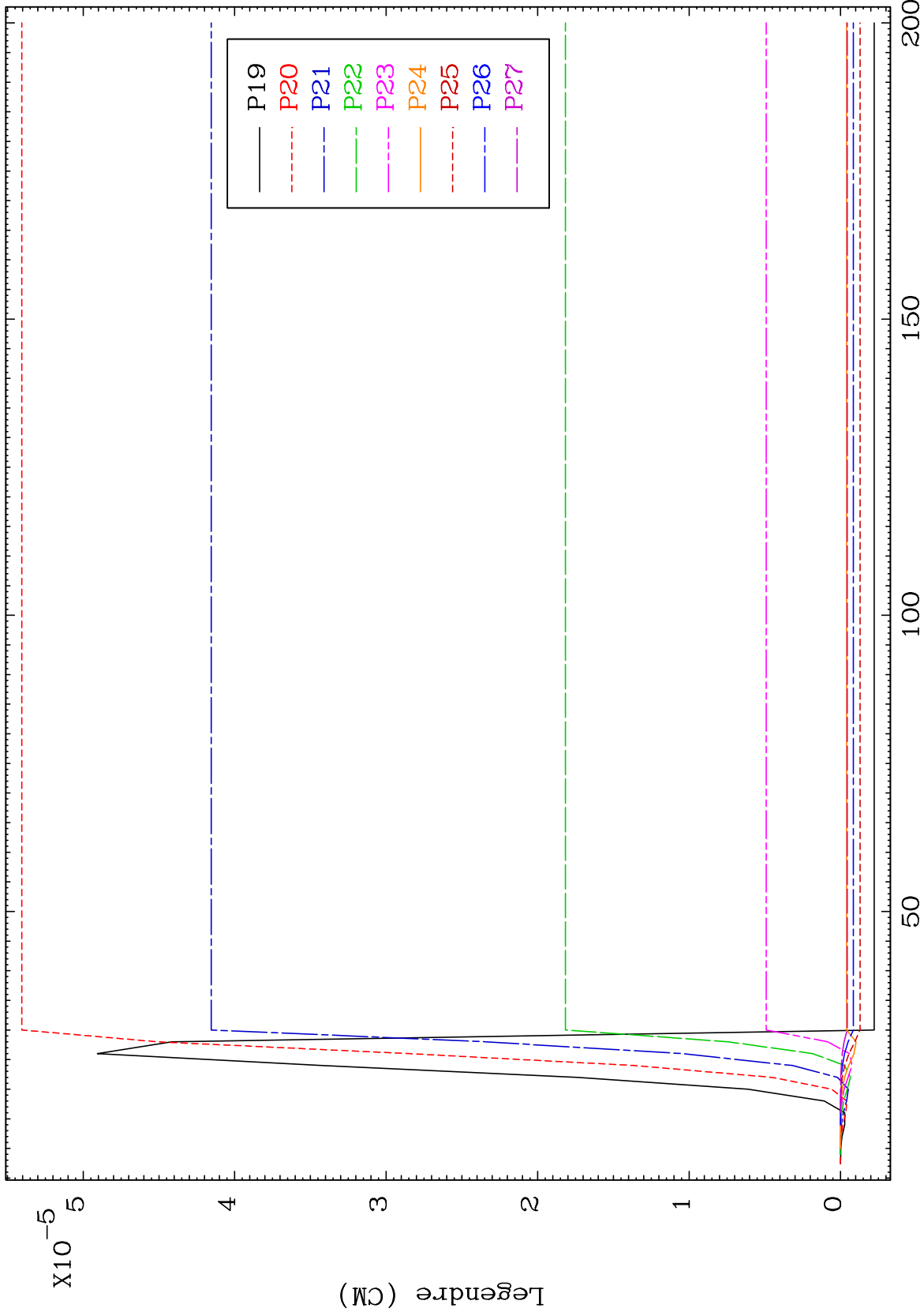
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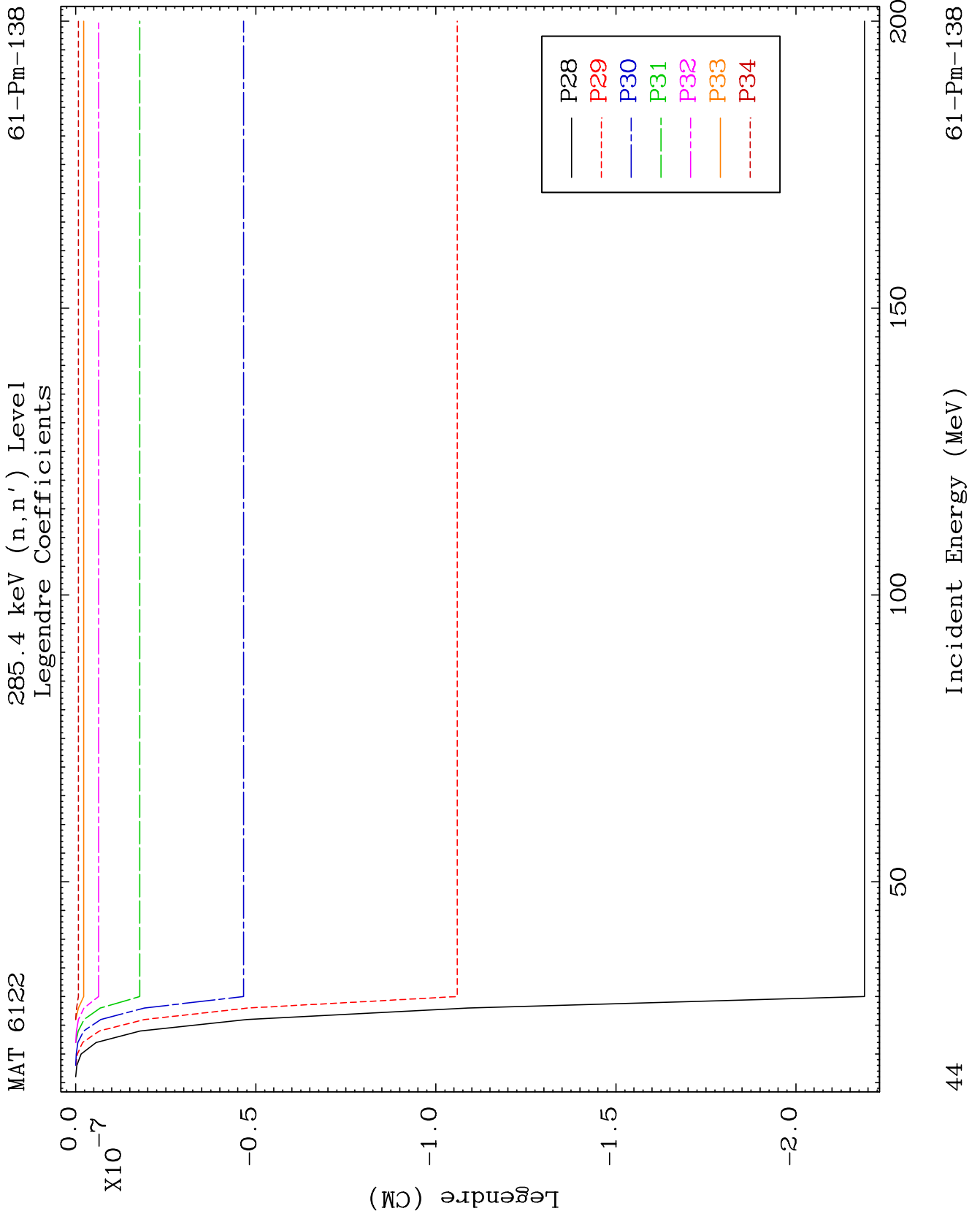


42

Incident Energy (MeV)

61-Pm-138

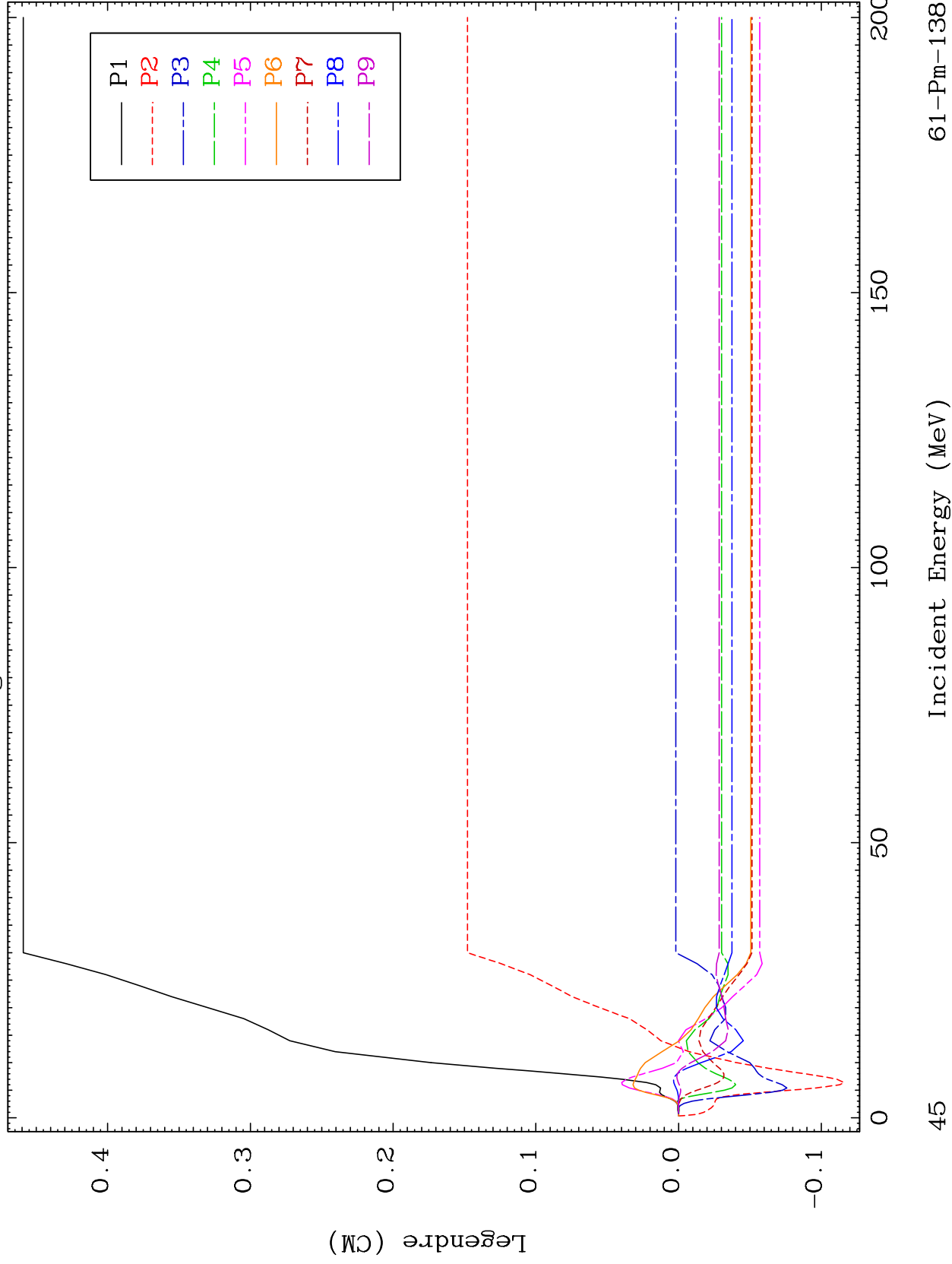




MAT 6122

307.1 keV (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

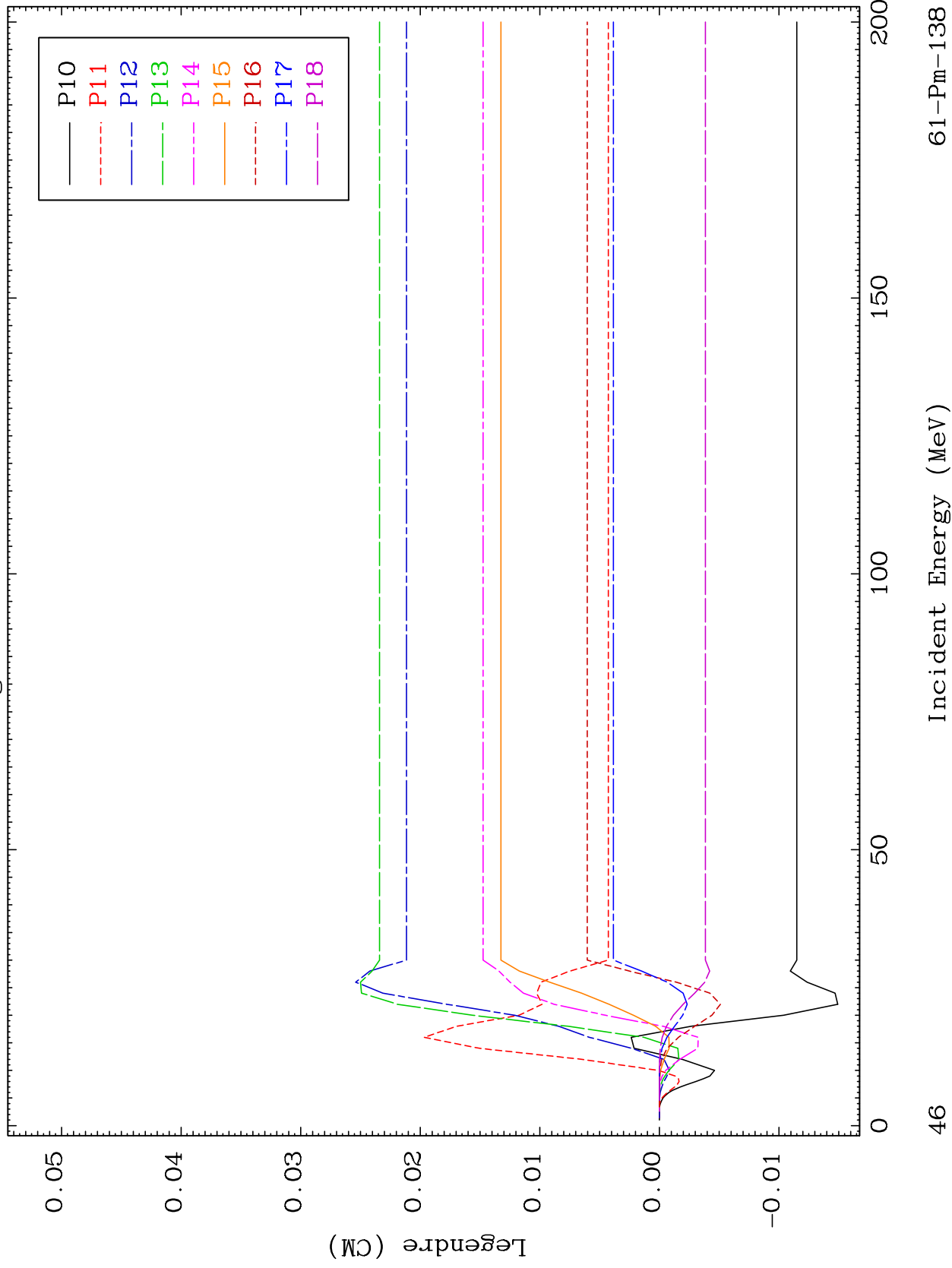
Incident Energy (MeV)

45

MAT 6122

307.1 keV (n,n') Level
Legendre Coefficients

61-Pm-138



46

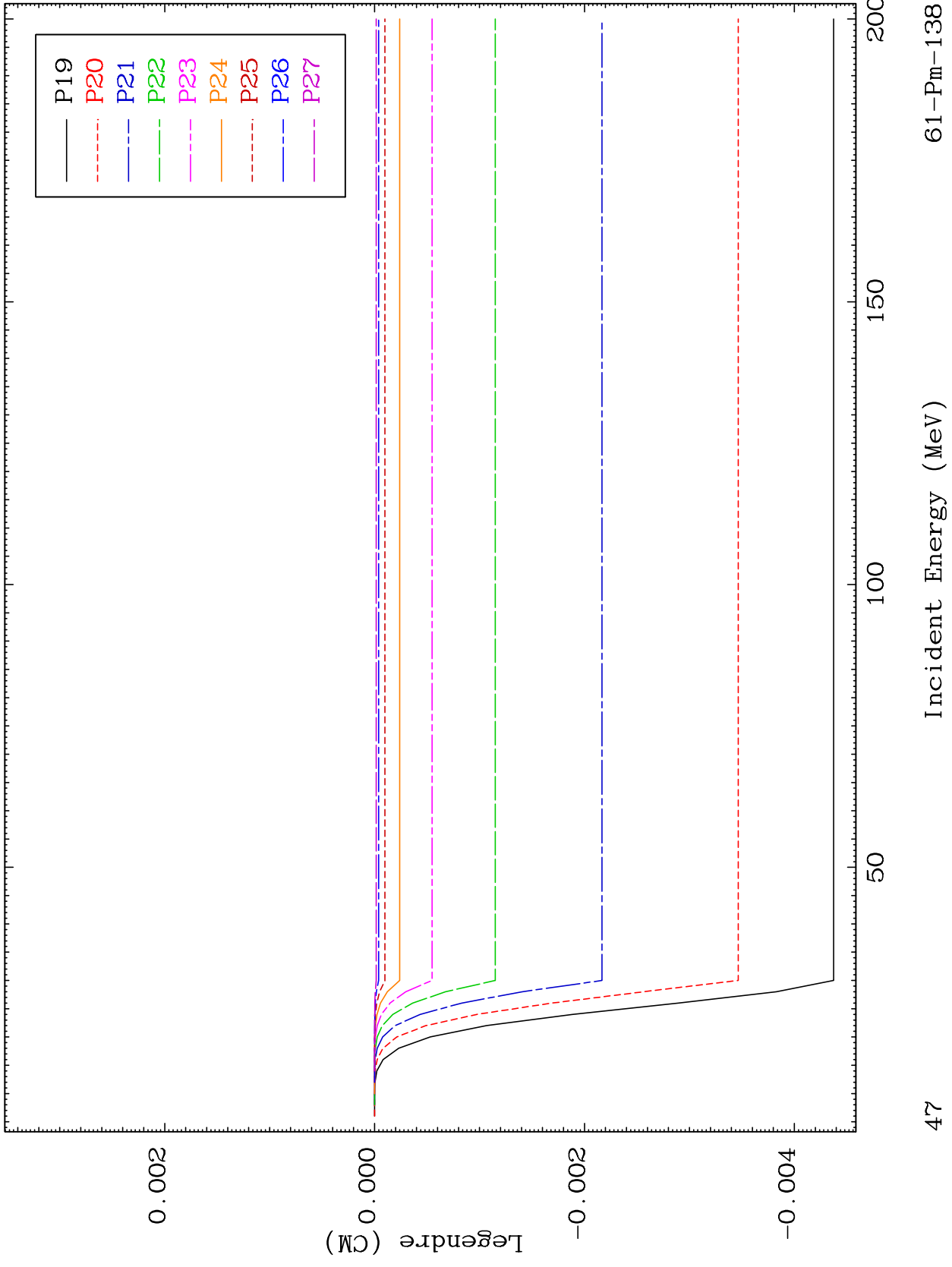
Incident Energy (MeV)

61-Pm-138

MAT 6122

307.1 keV (n,n') Level
Legendre Coefficients

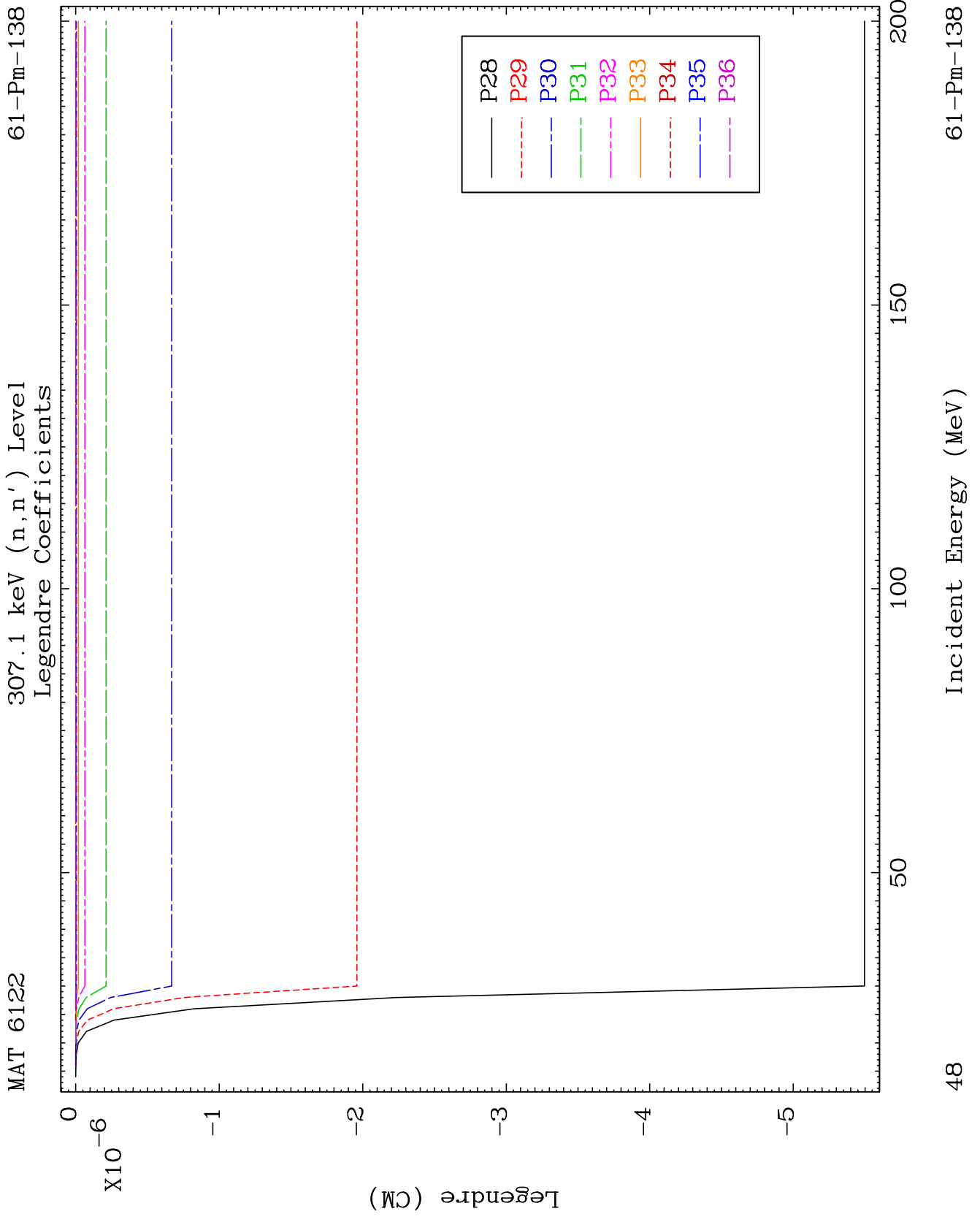
61-Pm-138



47

Incident Energy (MeV)

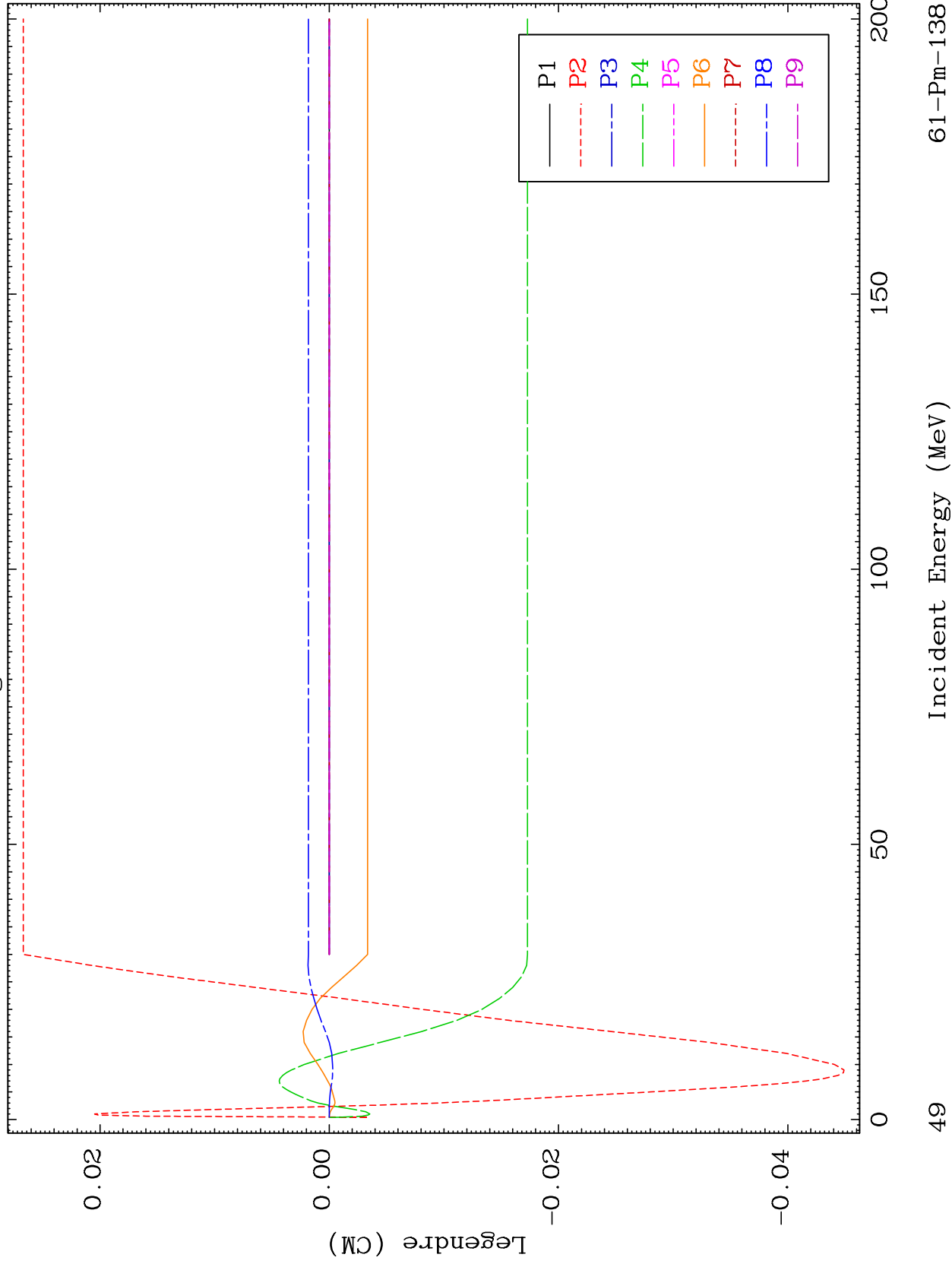
61-Pm-138



MAT 6122

352.4 keV (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

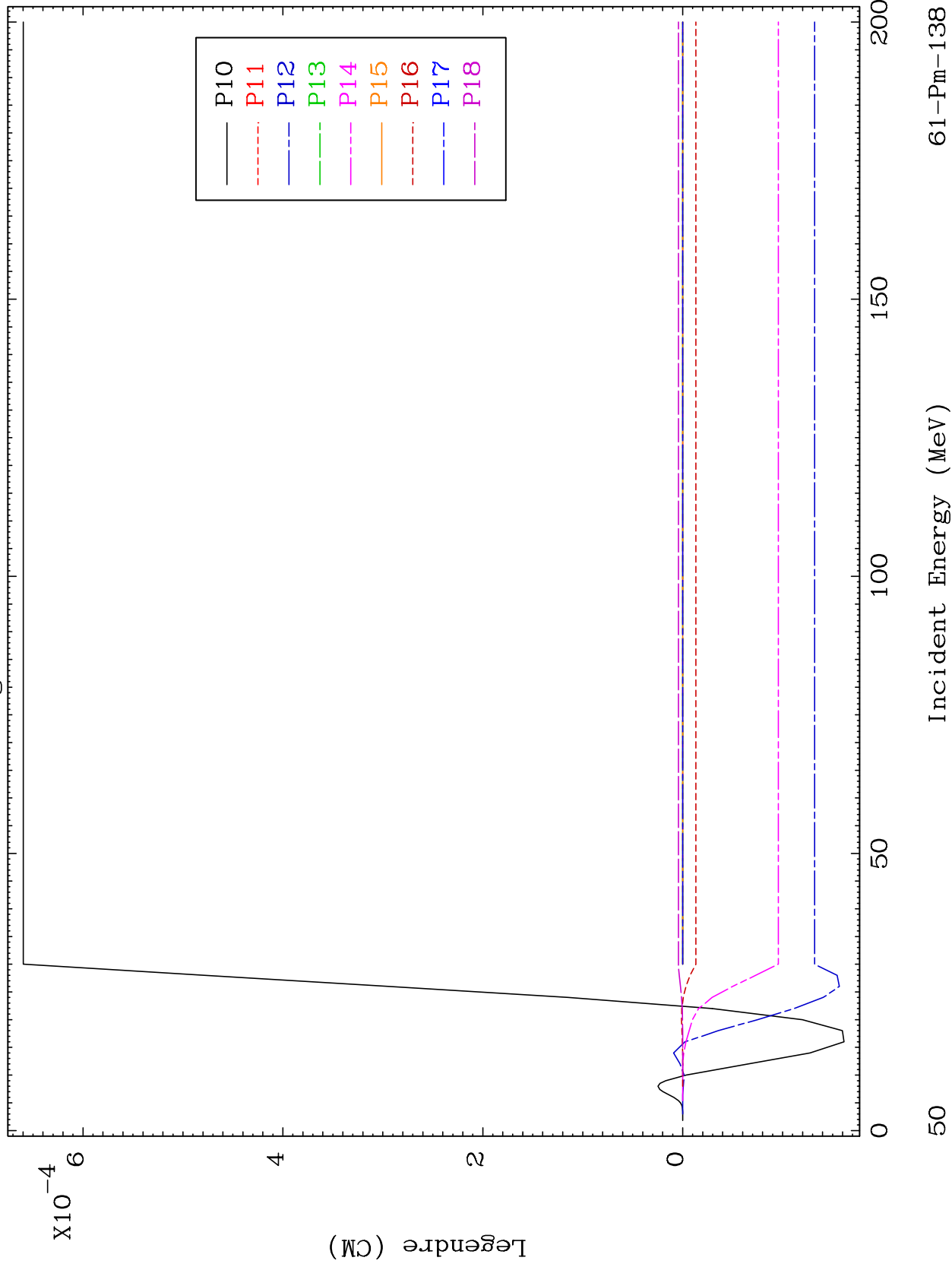
Incident Energy (MeV)

49

MAT 6122

352.4 keV (n,n') Level
Legendre Coefficients

61-Pm-138

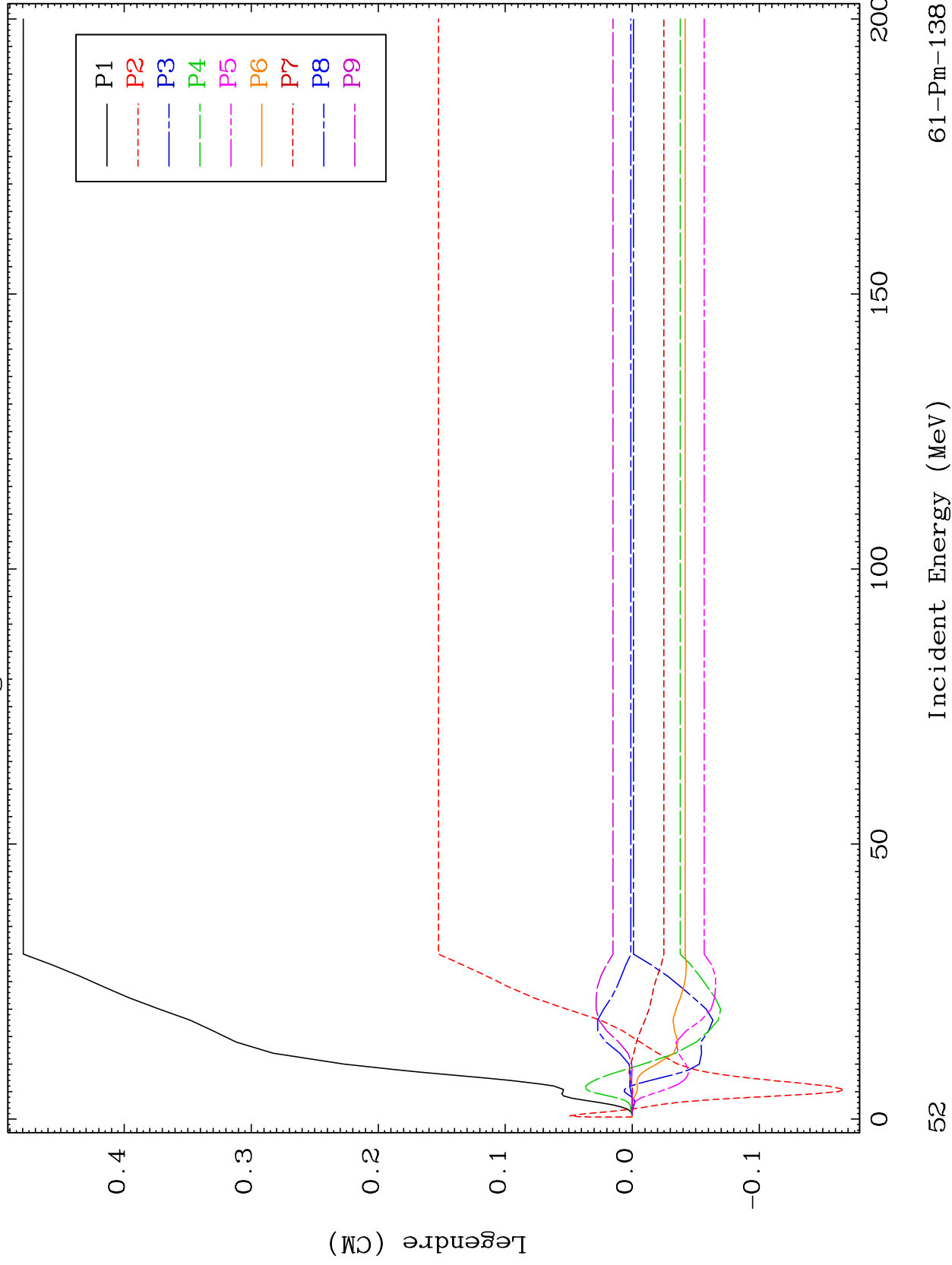


61-Pm-138

MAT 6122

365.5 keV (n,n') Level
Legendre Coefficients

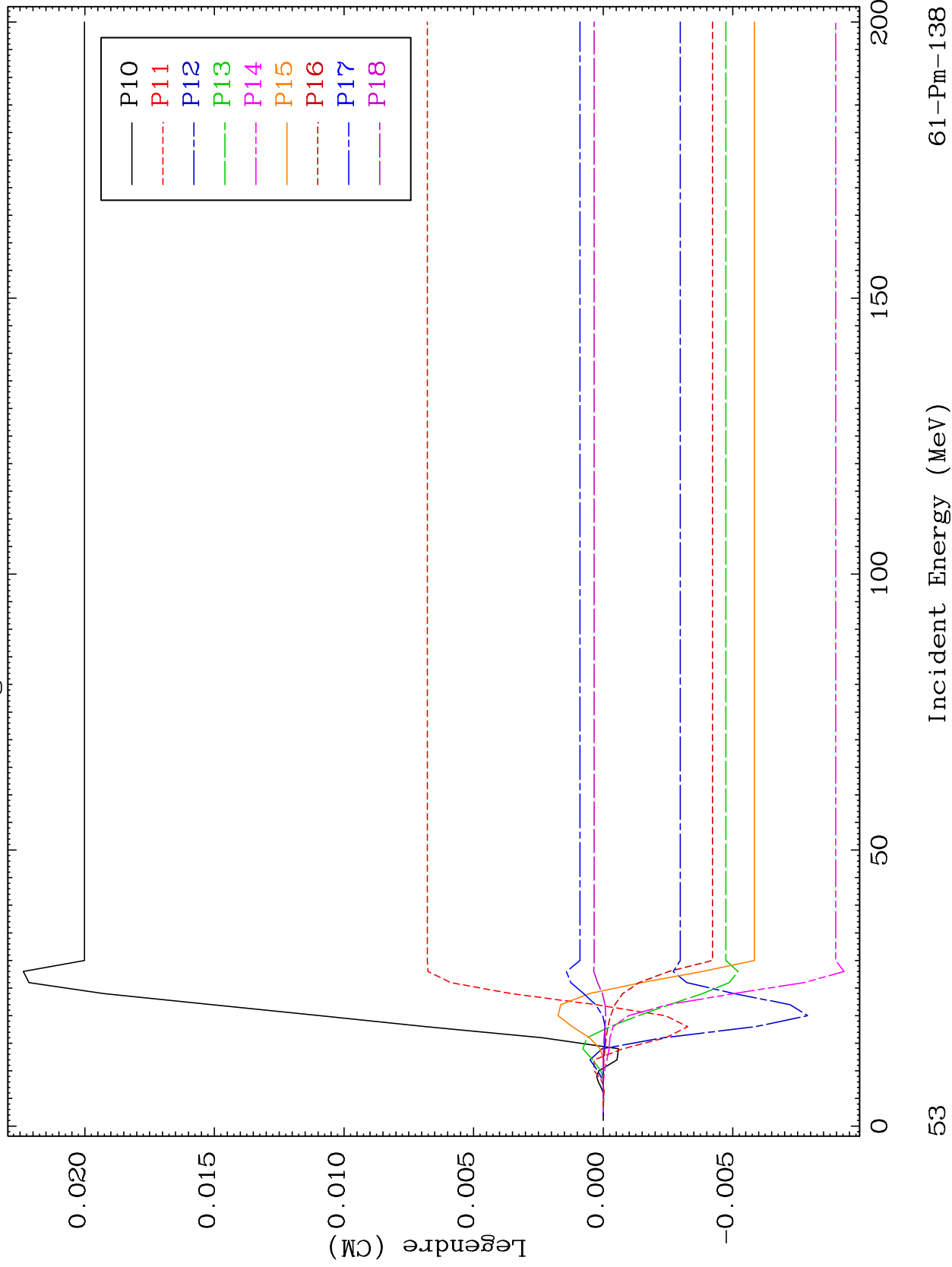
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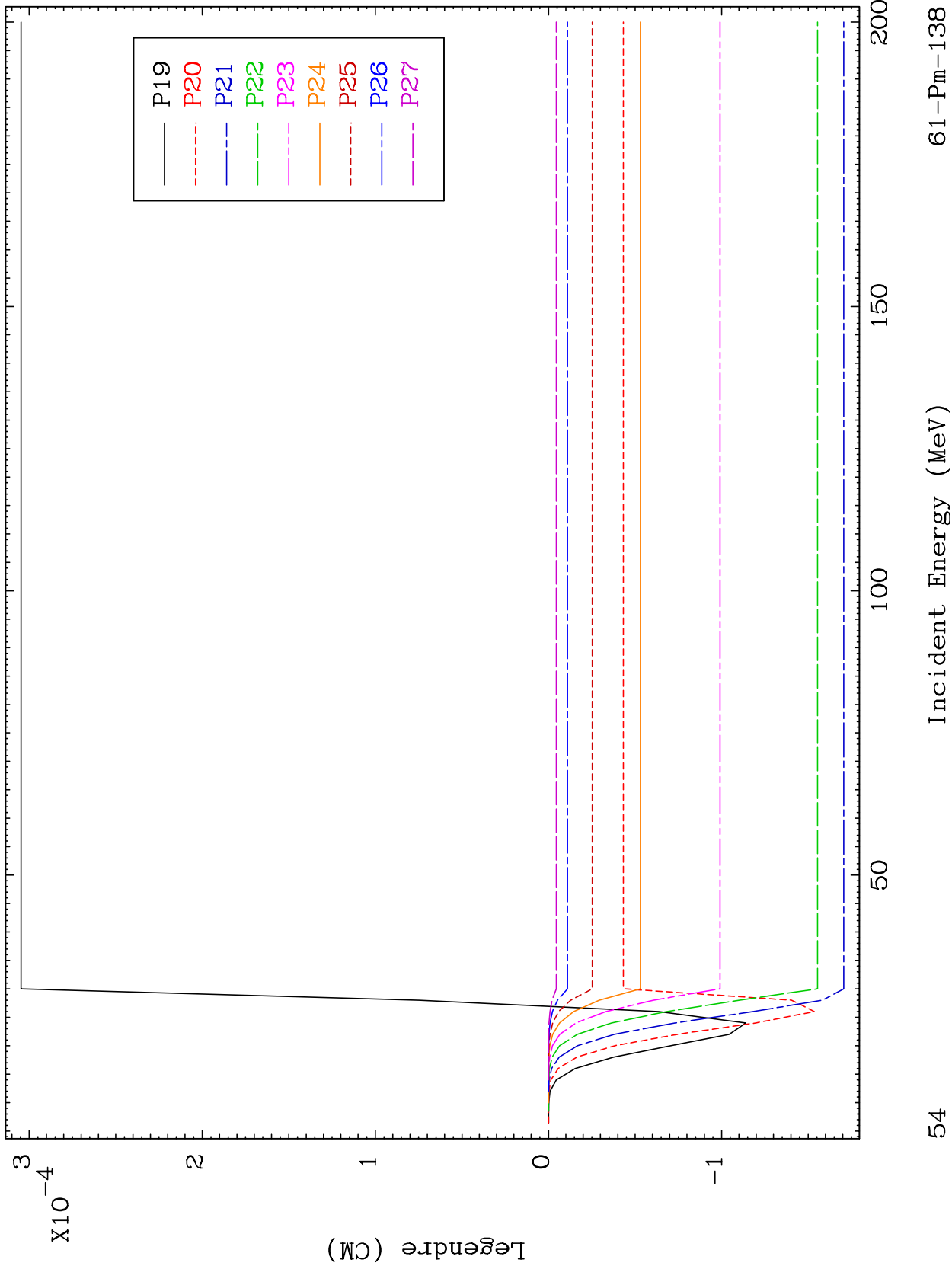


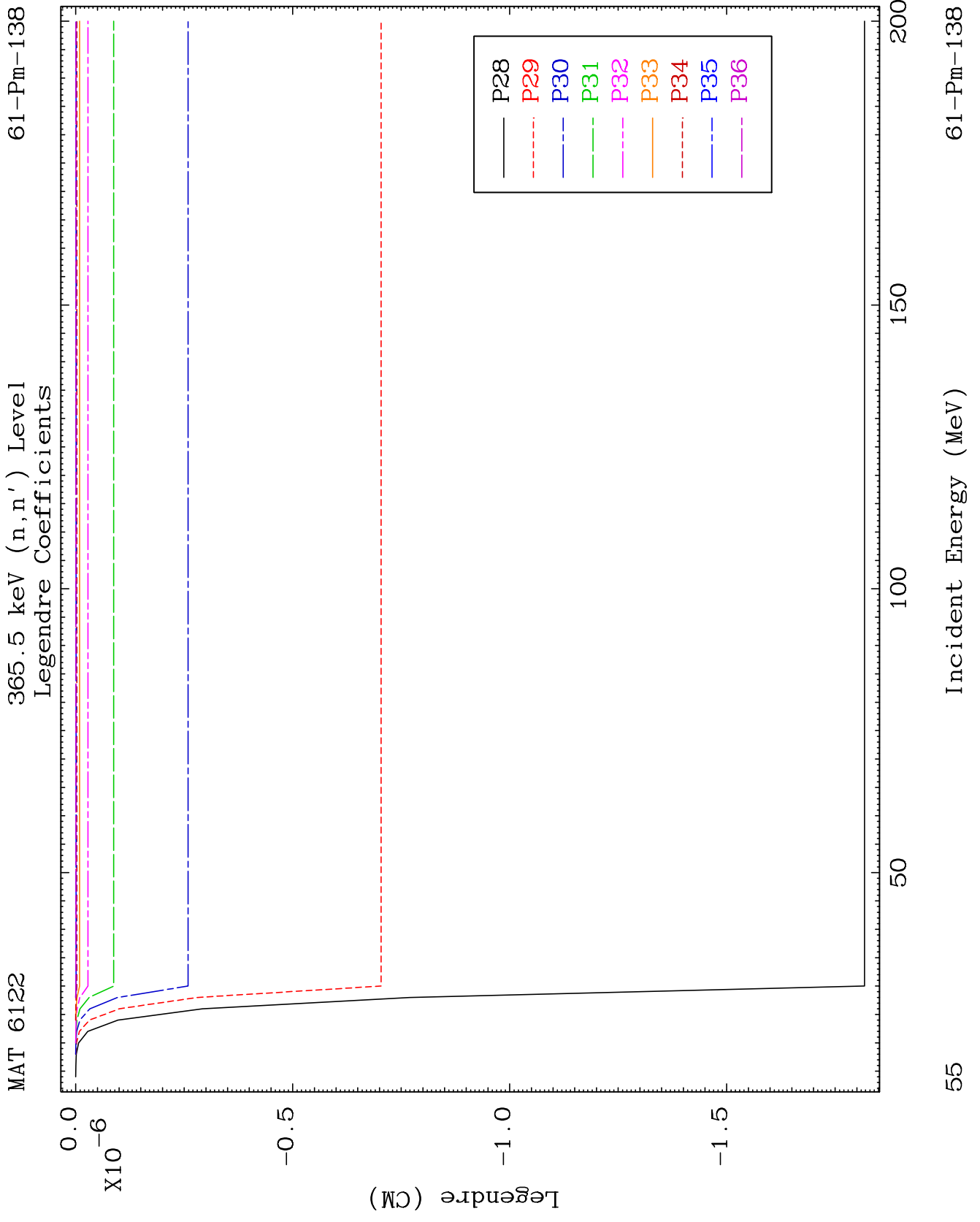
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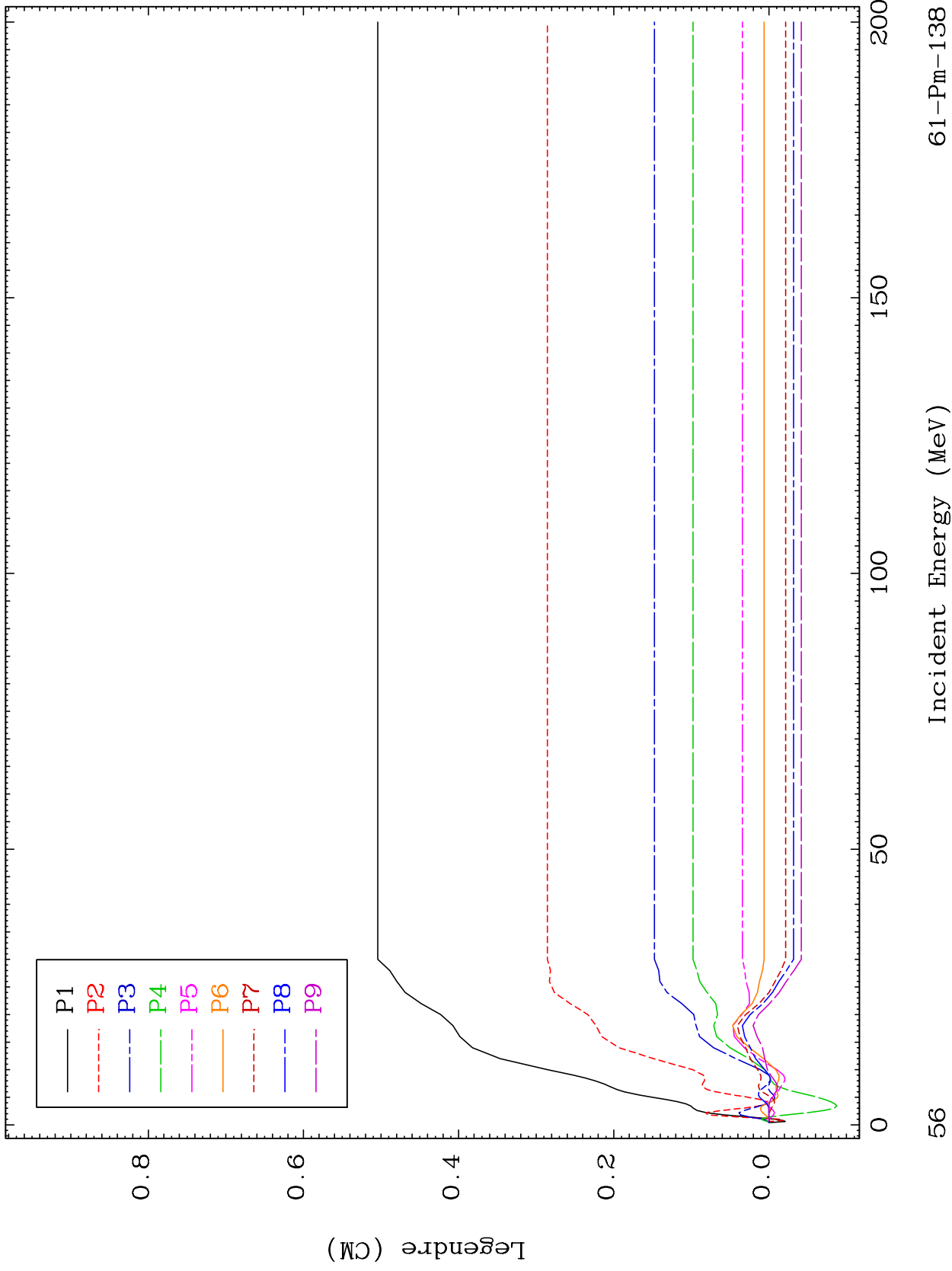
Incident Energy (MeV)

52





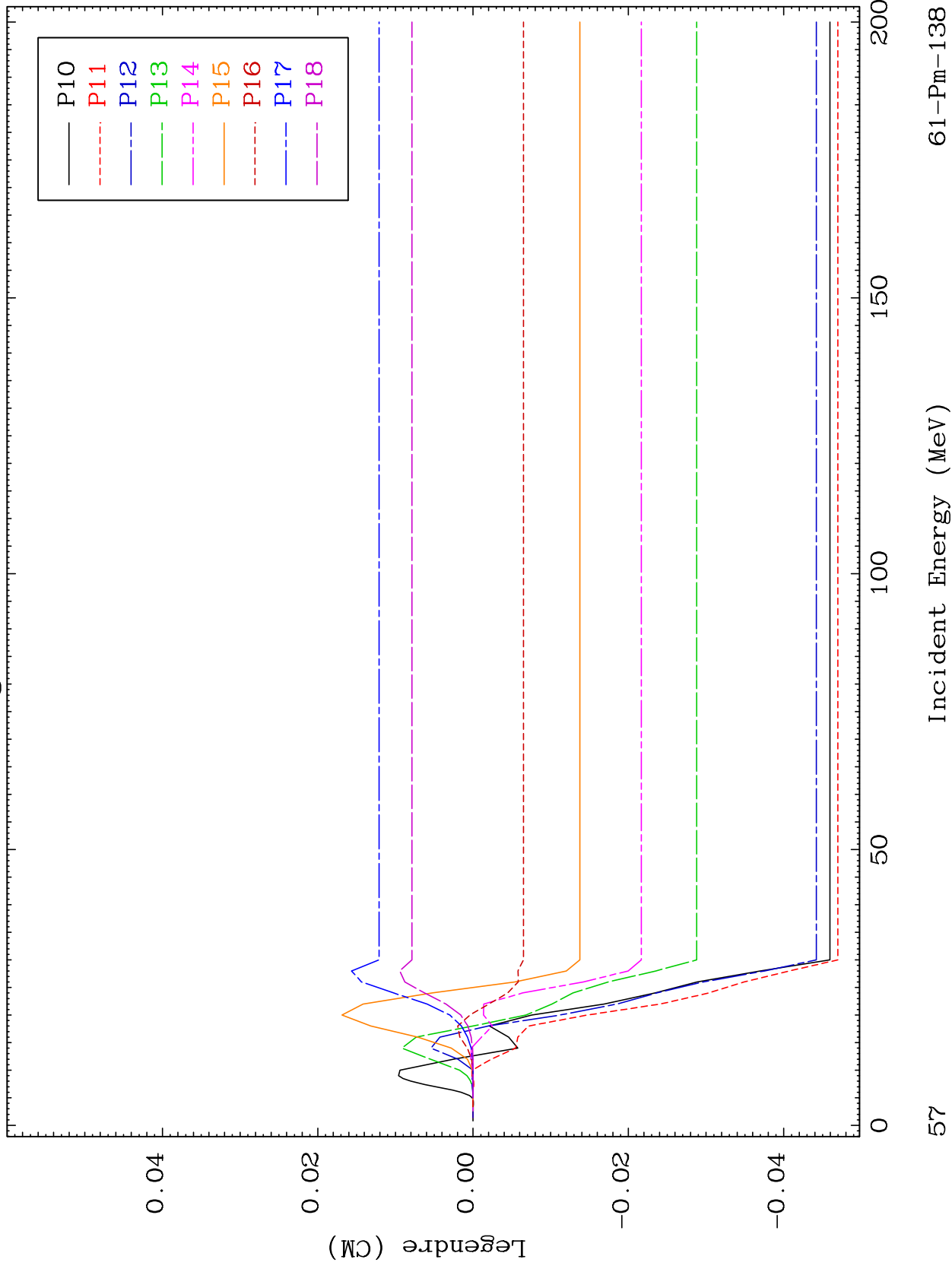




MAT 6122

377.4 keV (n,n') Level
Legendre Coefficients

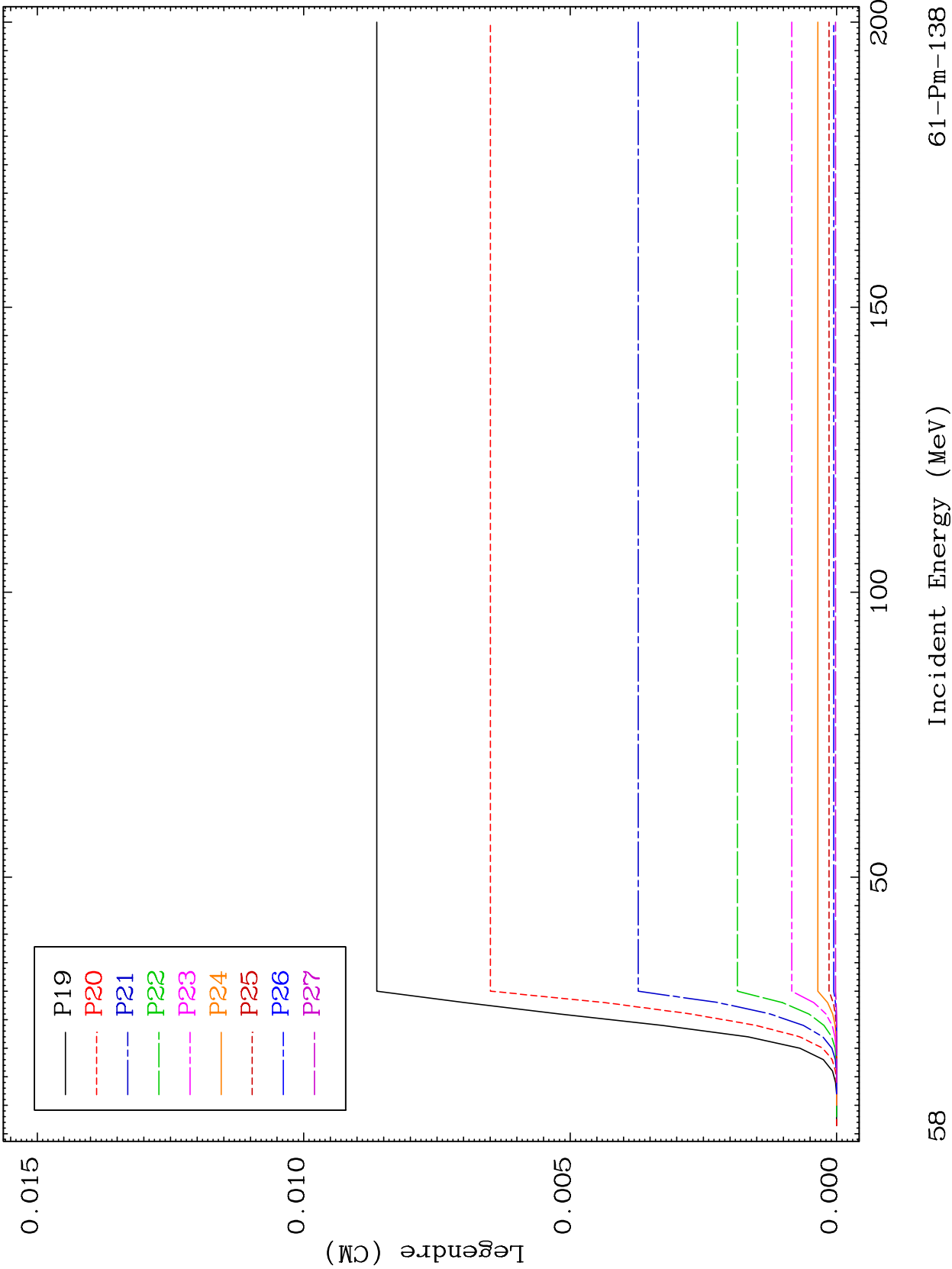
61-Pm-138



57

Incident Energy (MeV)

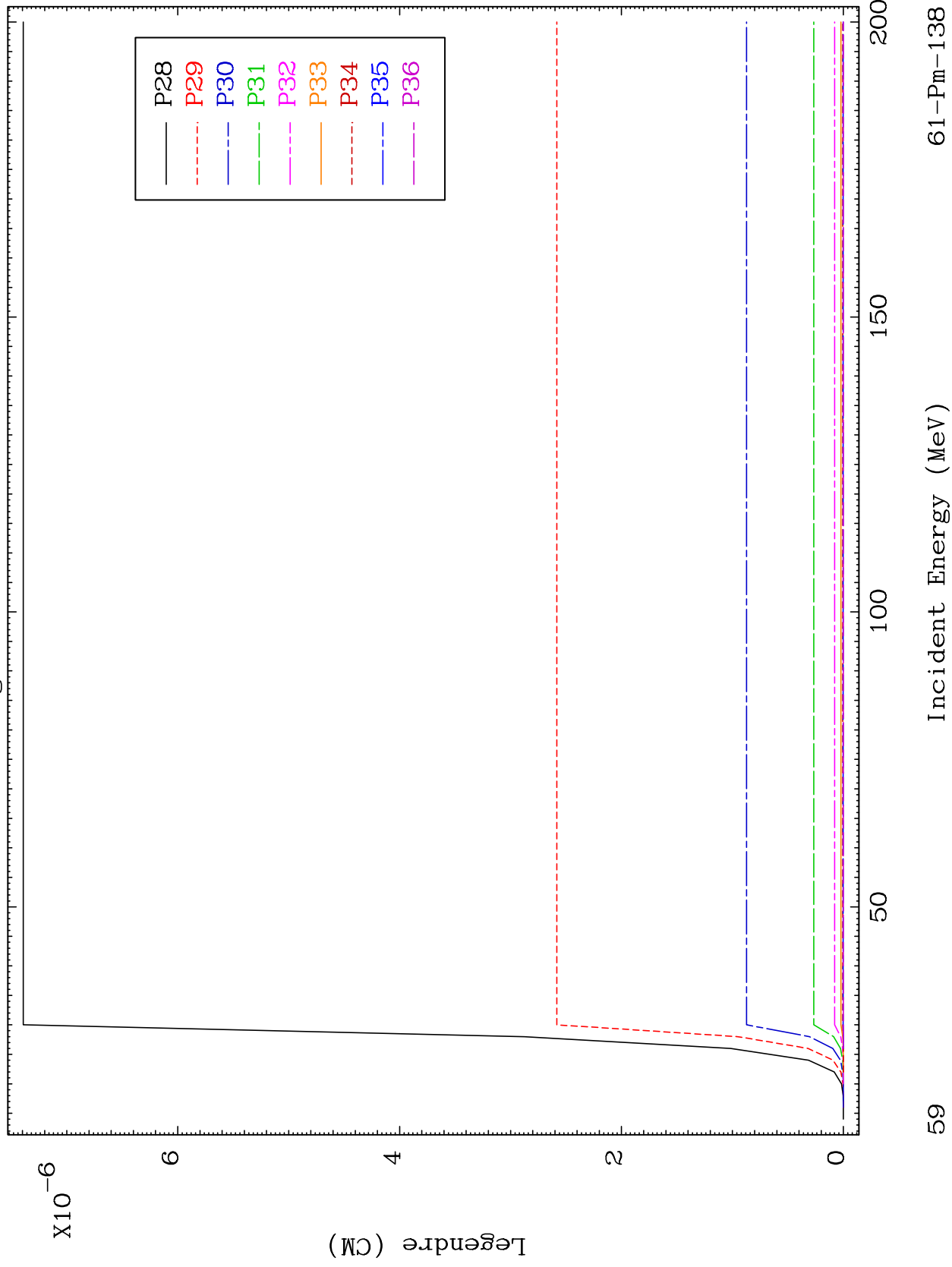
61-Pm-138



MAT 6122

377.4 keV (n,n') Level
Legendre Coefficients

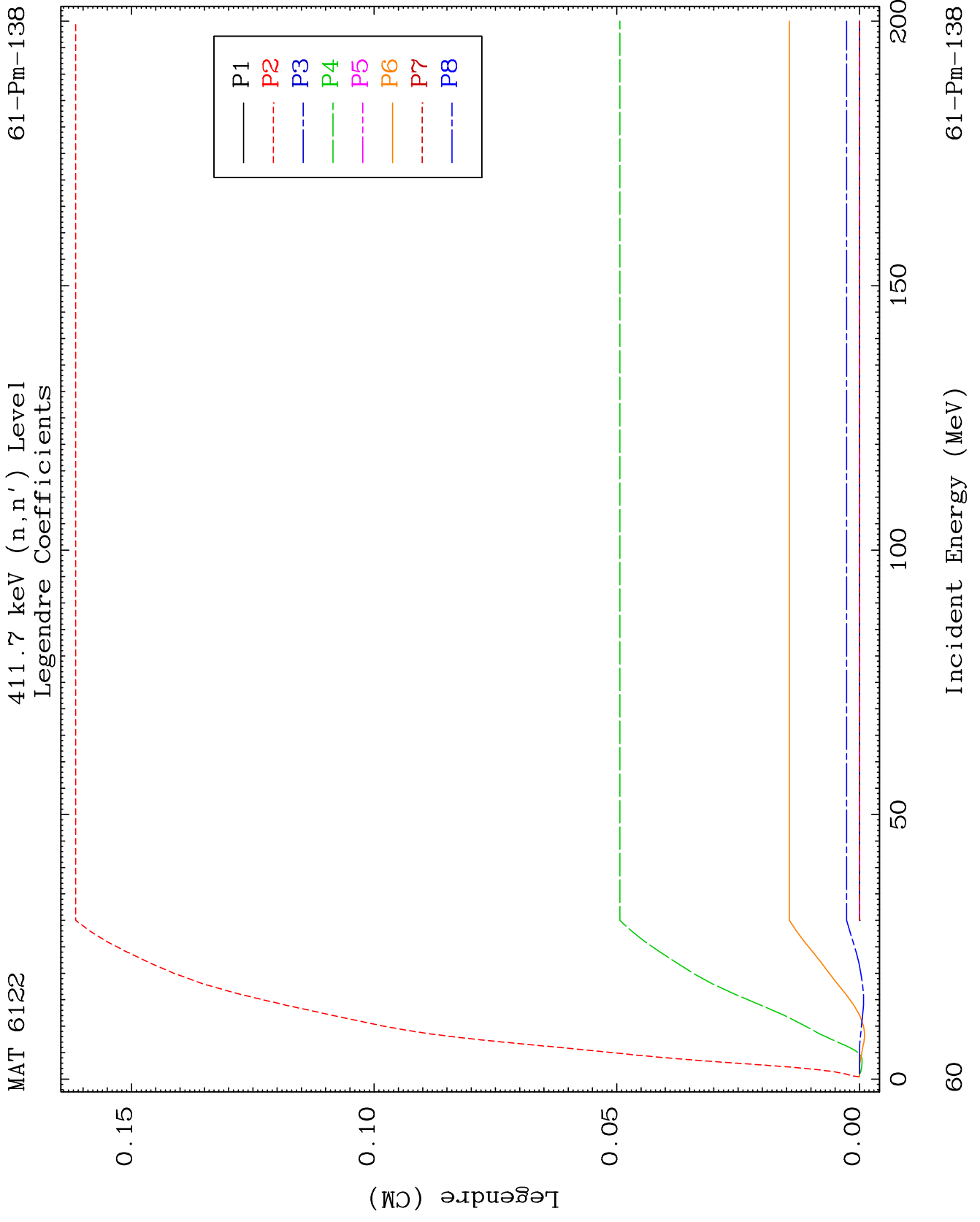
61-Pm-138



59

Incident Energy (MeV)

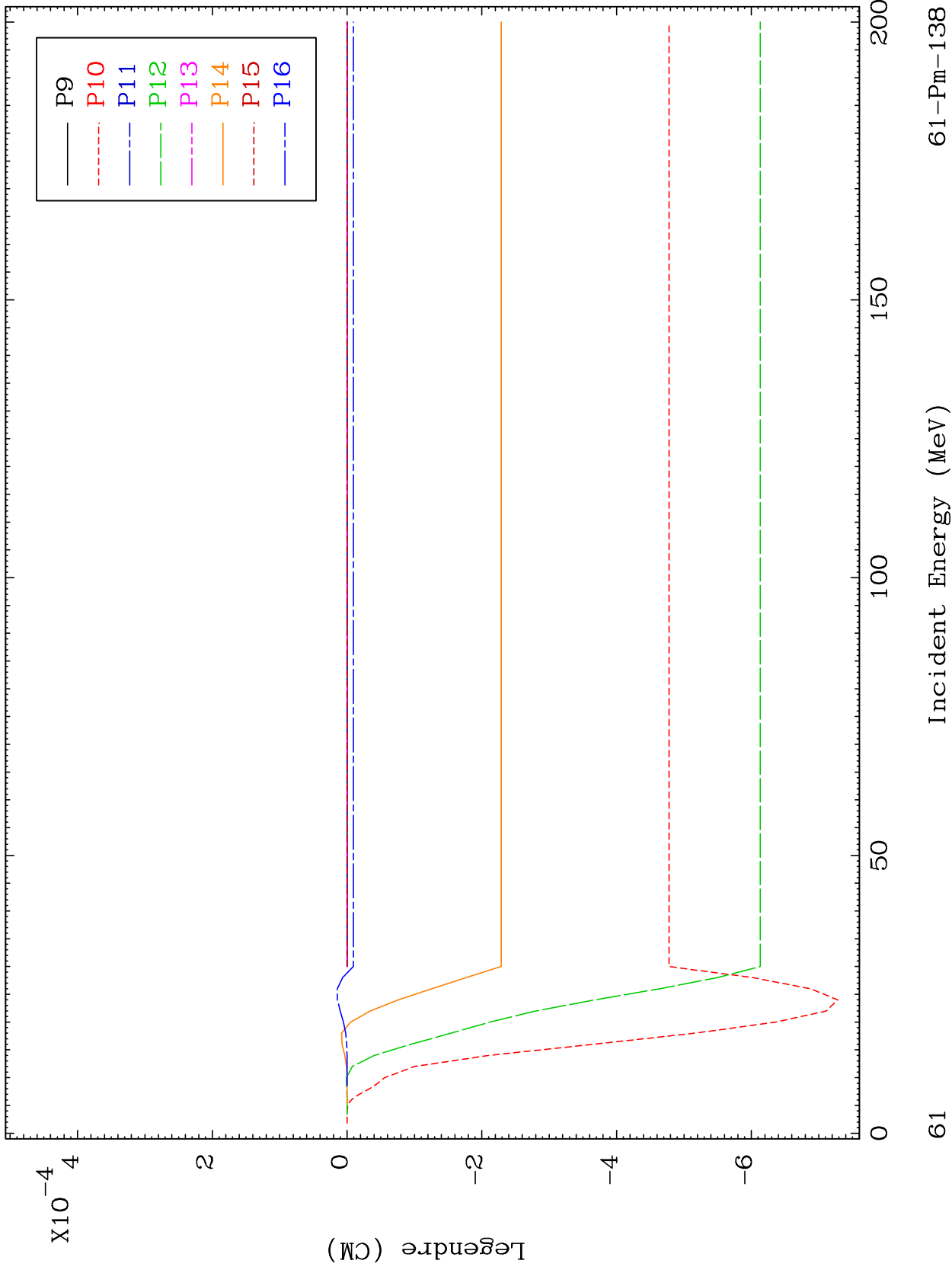
61-Pm-138



MAT 6122

411.7 keV (n,n') Level
Legendre Coefficients

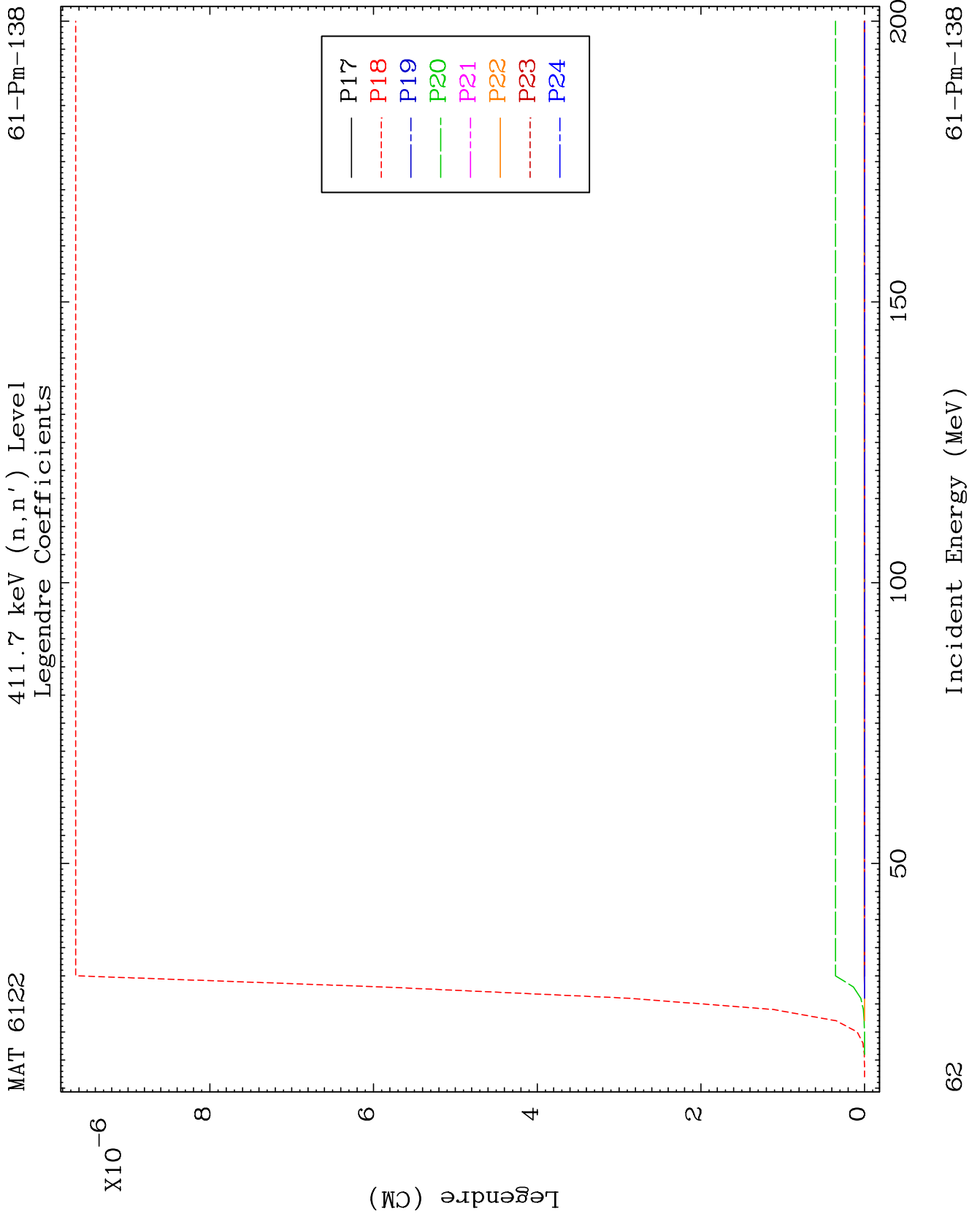
61-Pm-138



61

Incident Energy (MeV)

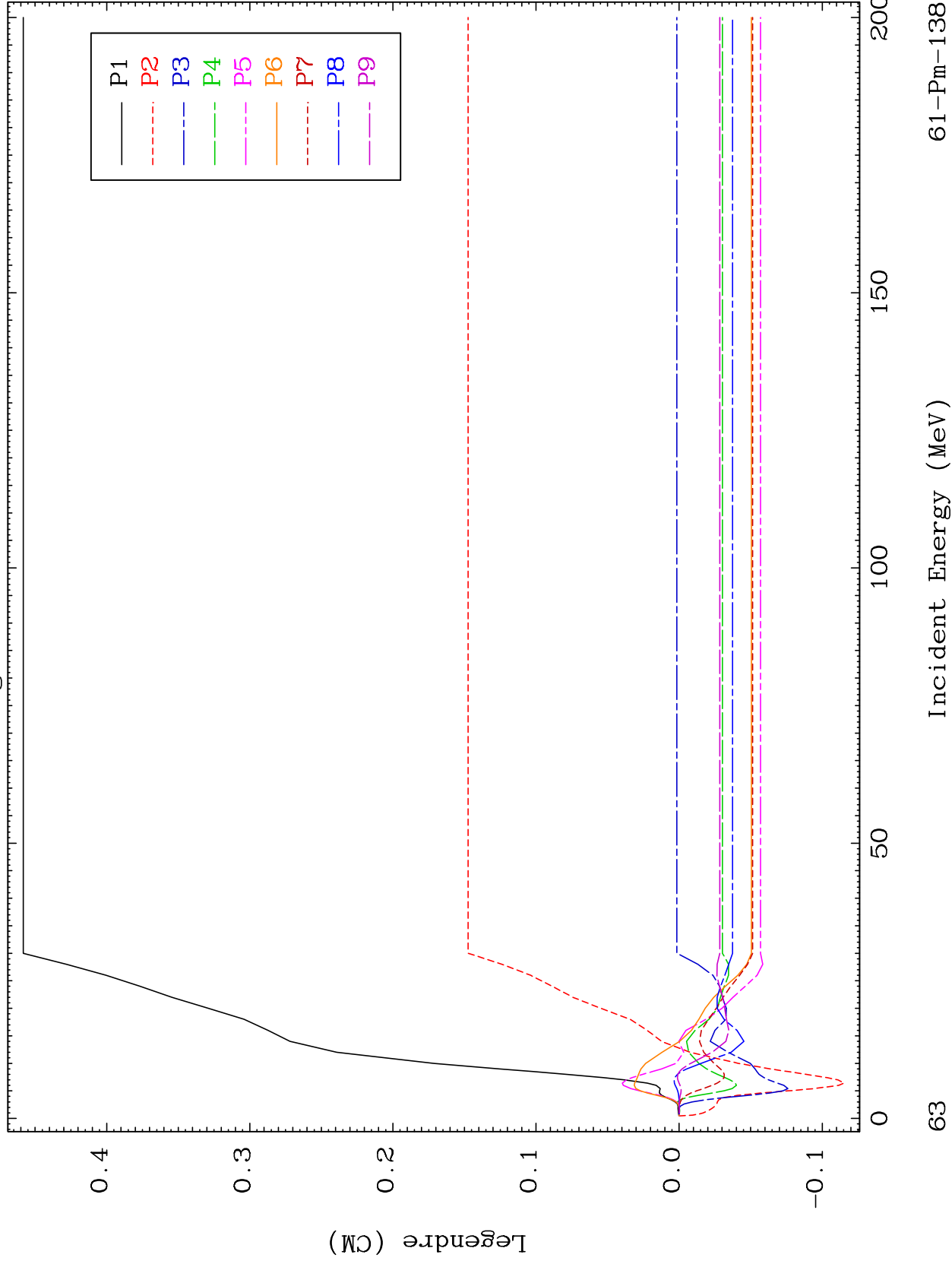
61-Pm-138



MAT 6122

429.2 keV (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

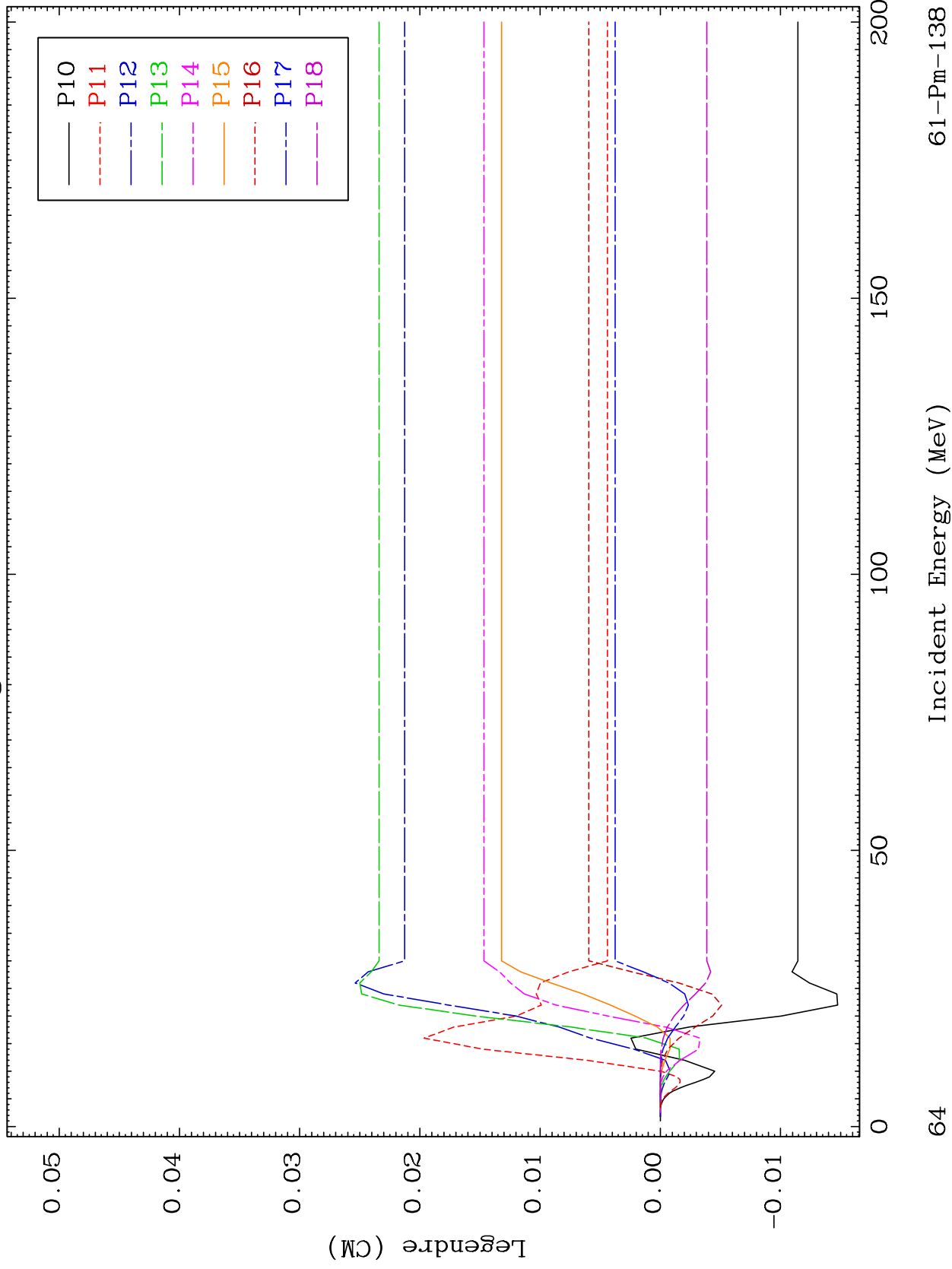
Incident Energy (MeV)

63

MAT 6122

429.2 keV (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

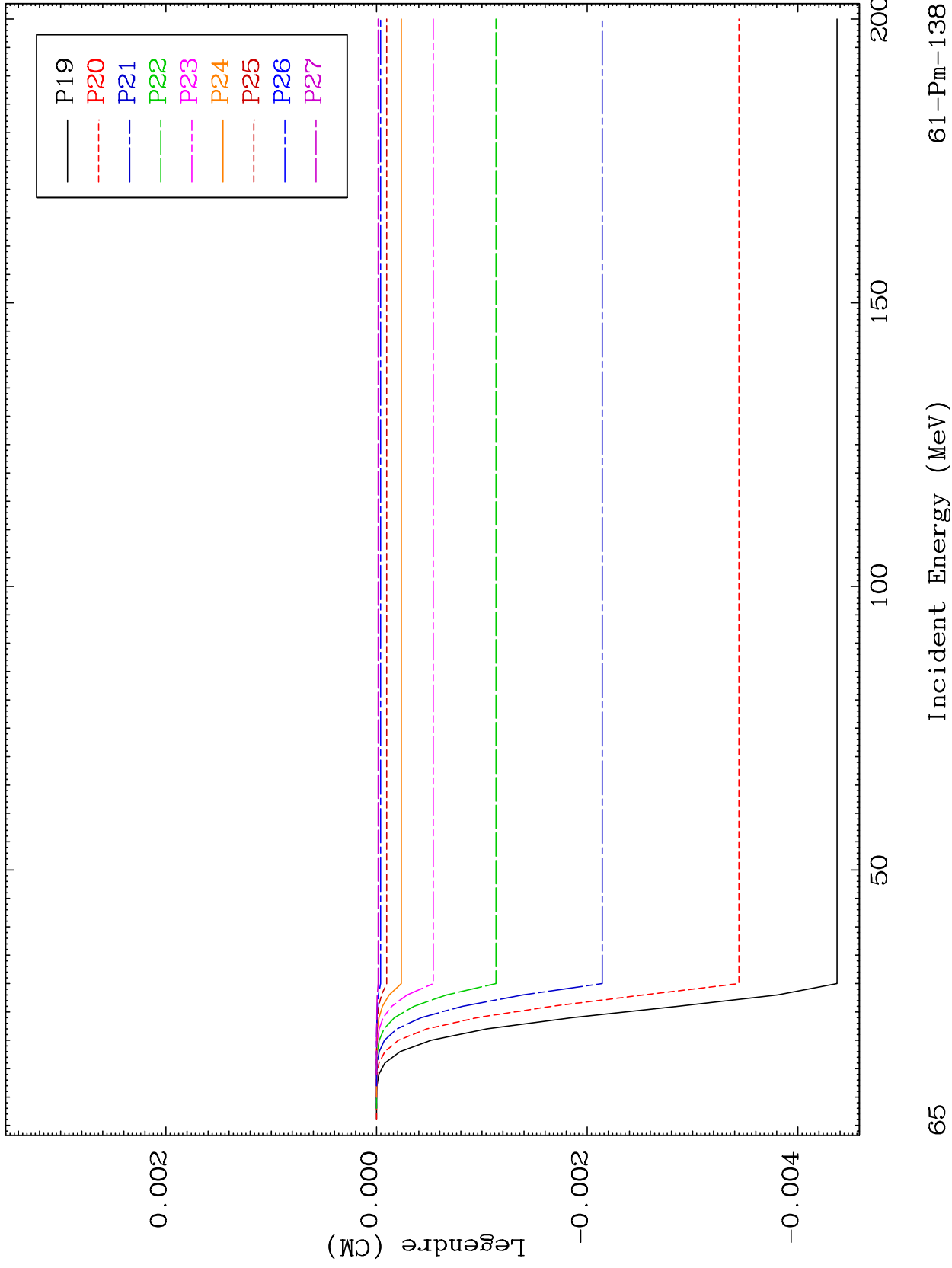
Incident Energy (MeV)

64

MAT 6122

429.2 keV (n,n') Level
Legendre Coefficients

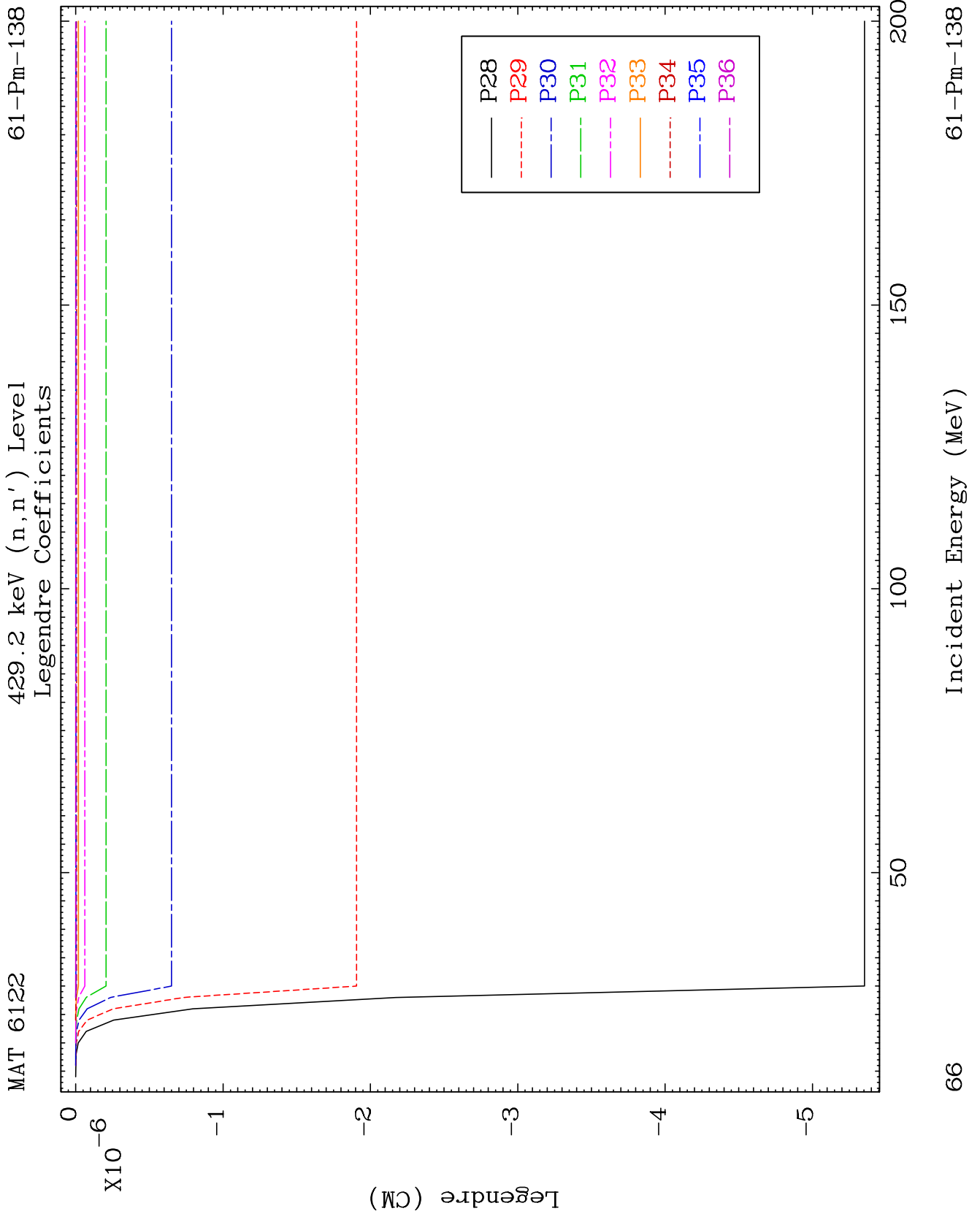
61-Pm-138



65

Incident Energy (MeV)

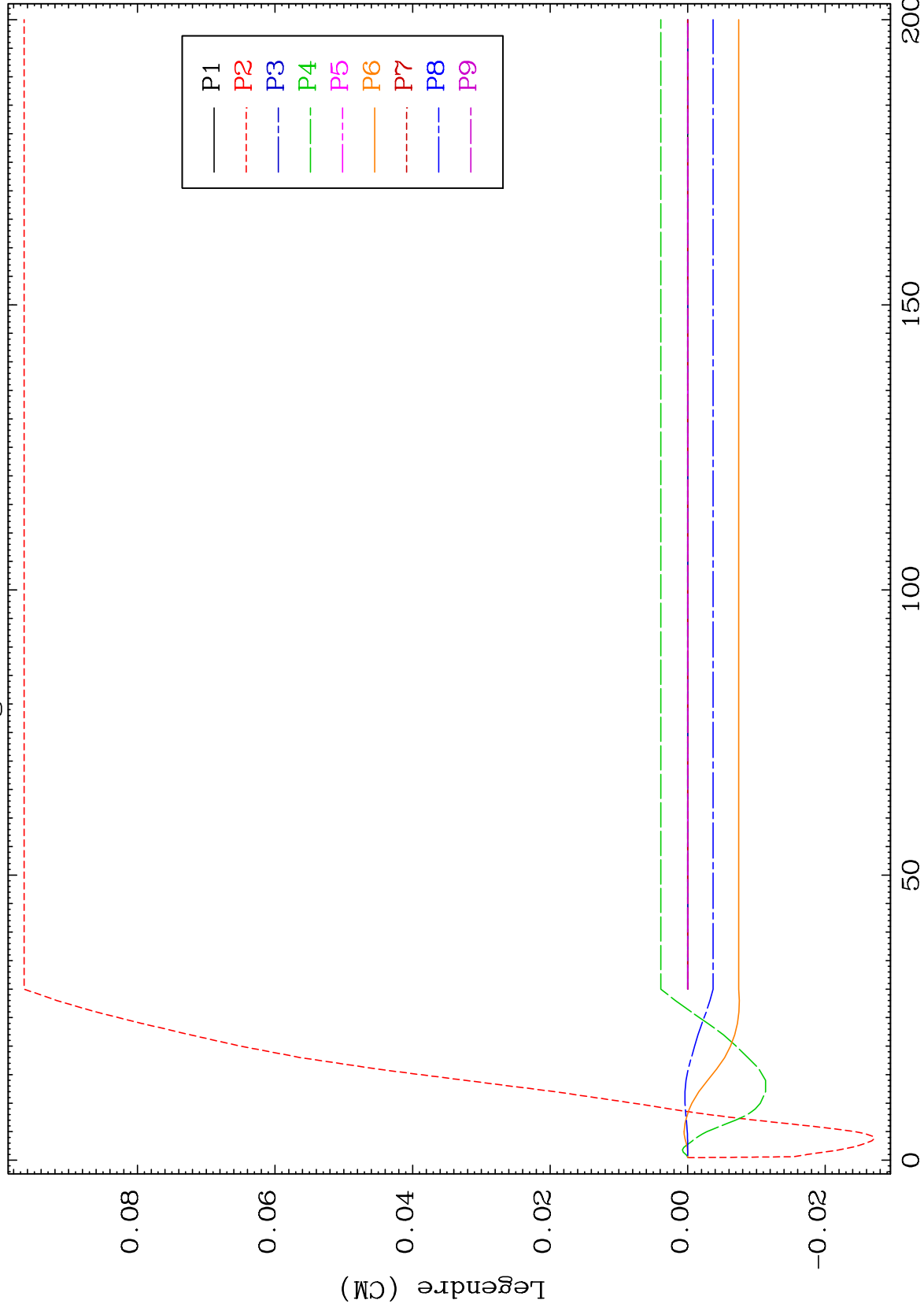
61-Pm-138



MAT 6122

434.5 keV (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

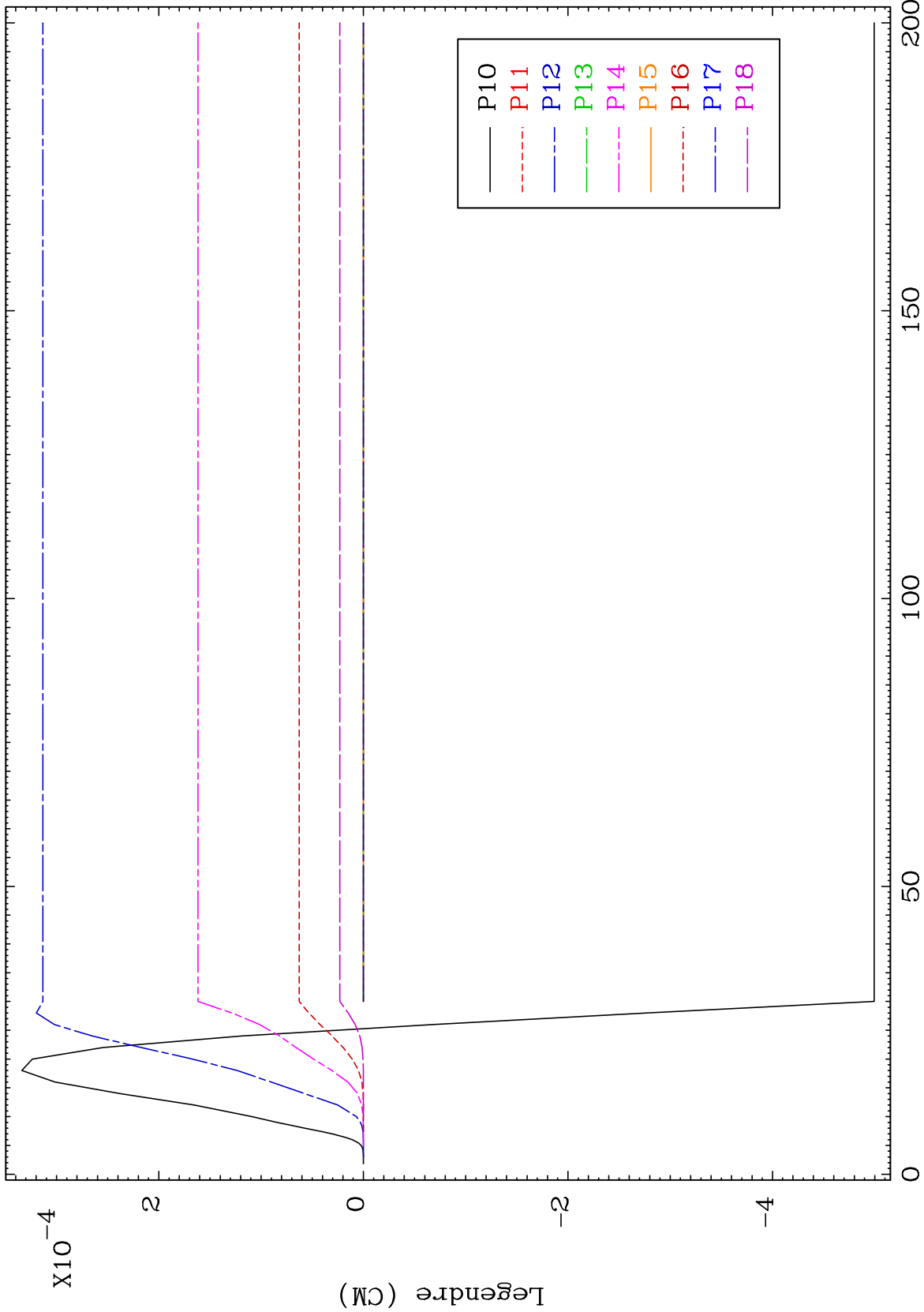
Incident Energy (MeV)

67

MAT 6122

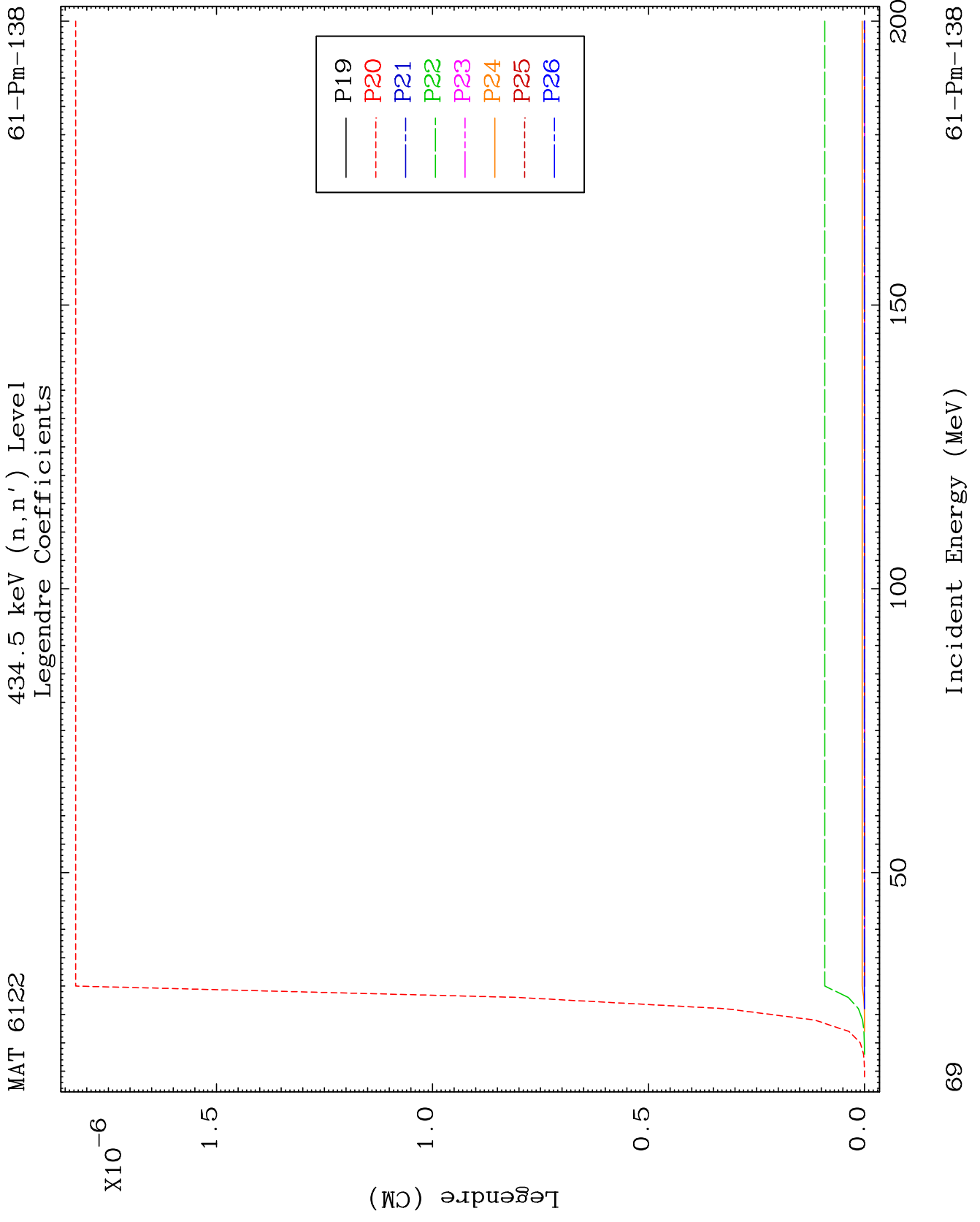
434.5 keV (n,n') Level
Legendre Coefficients

61-Pm-138



68

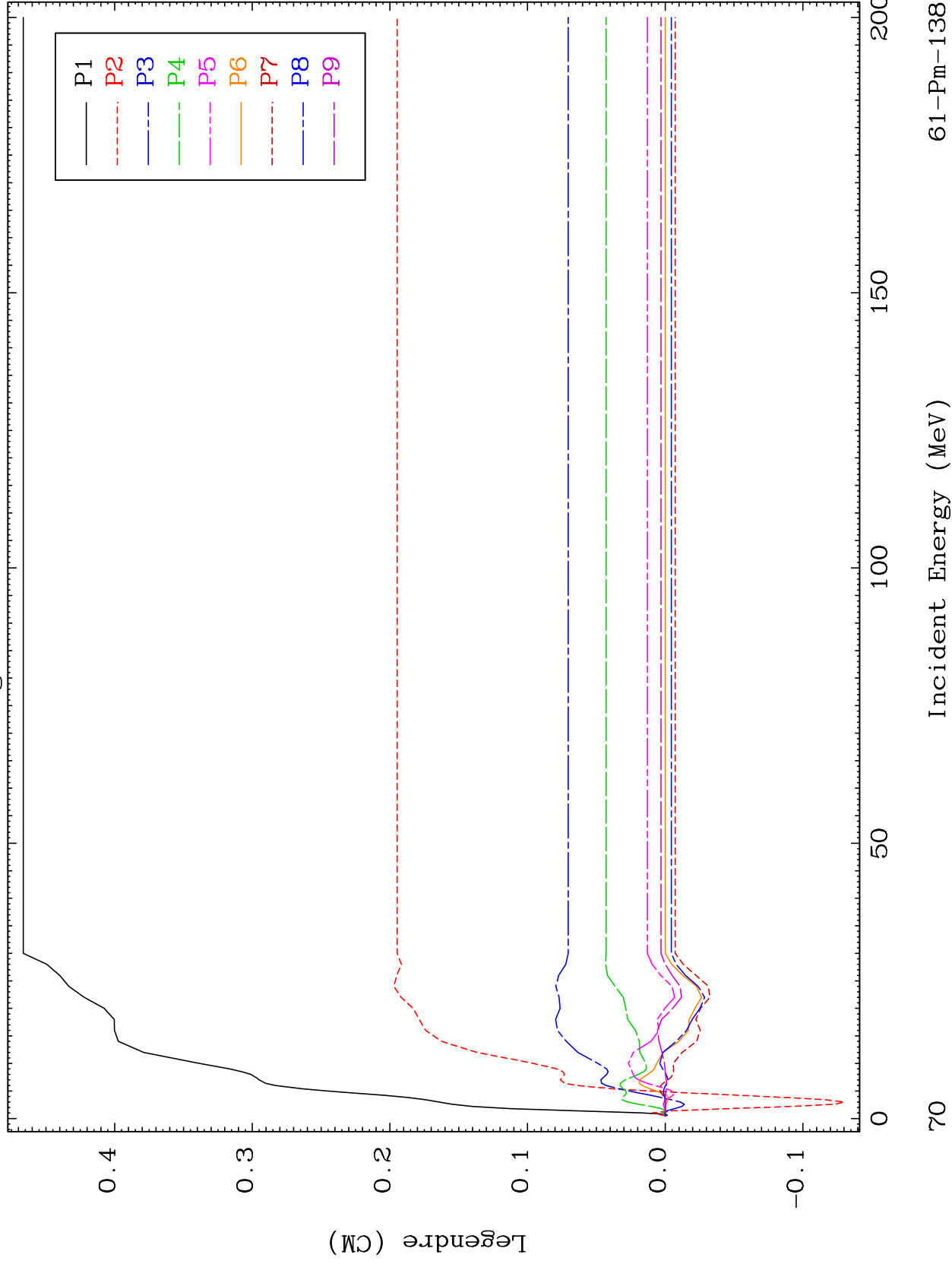
61-Pm-138



MAT 6122

445.6 keV (n,n') Level
Legendre Coefficients

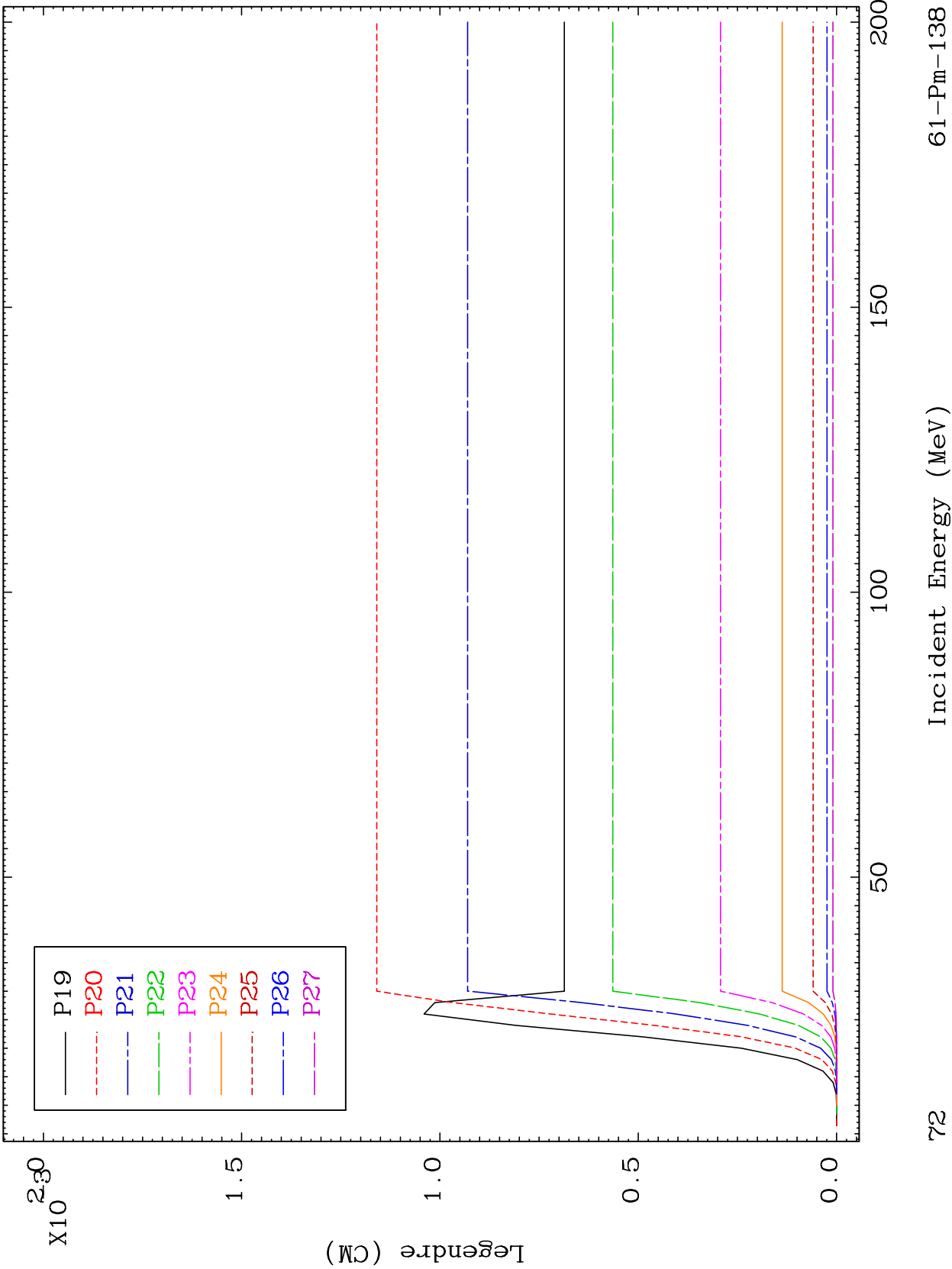
61-Pm-138



61-Pm-138

Incident Energy (MeV)

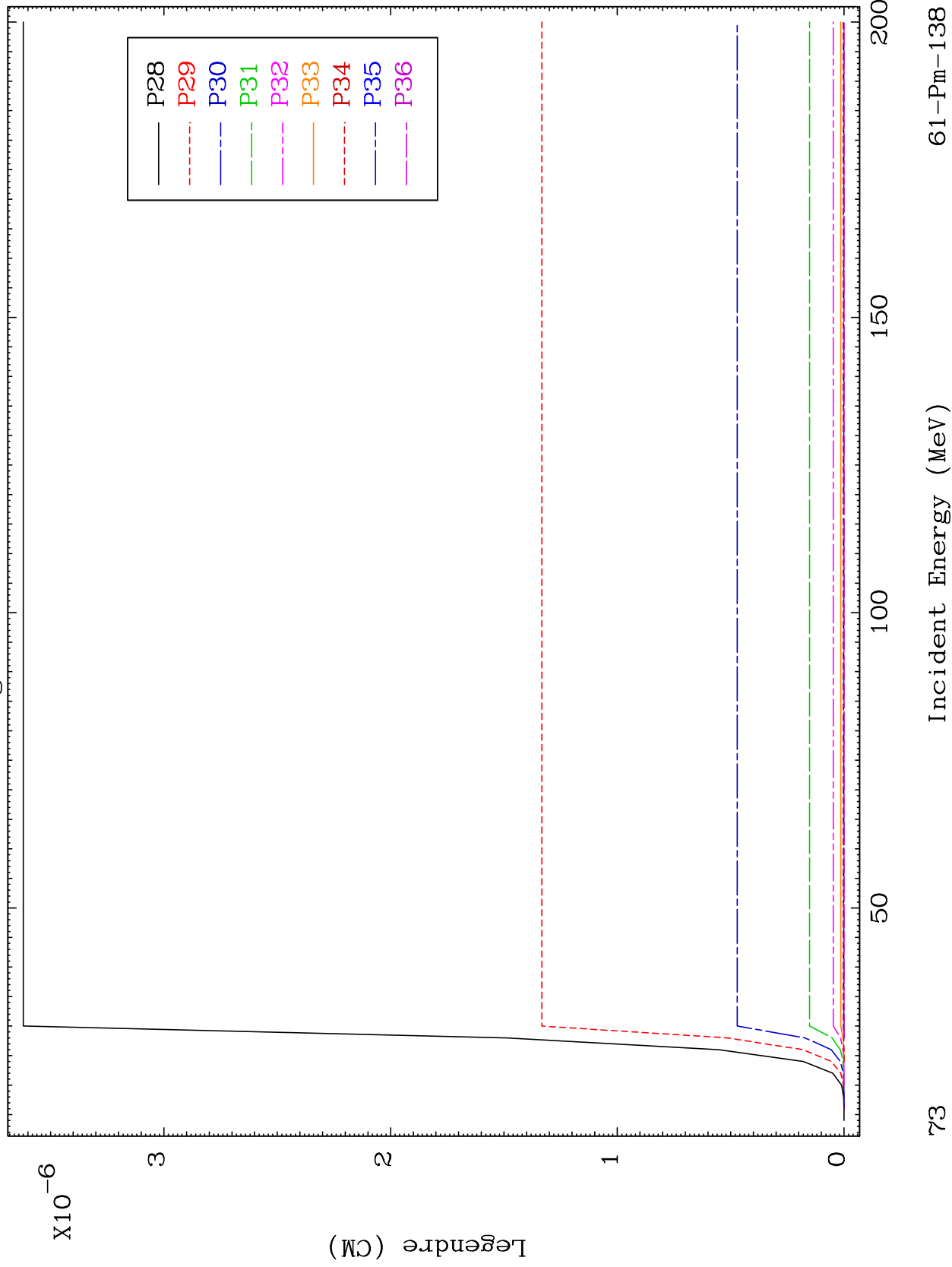
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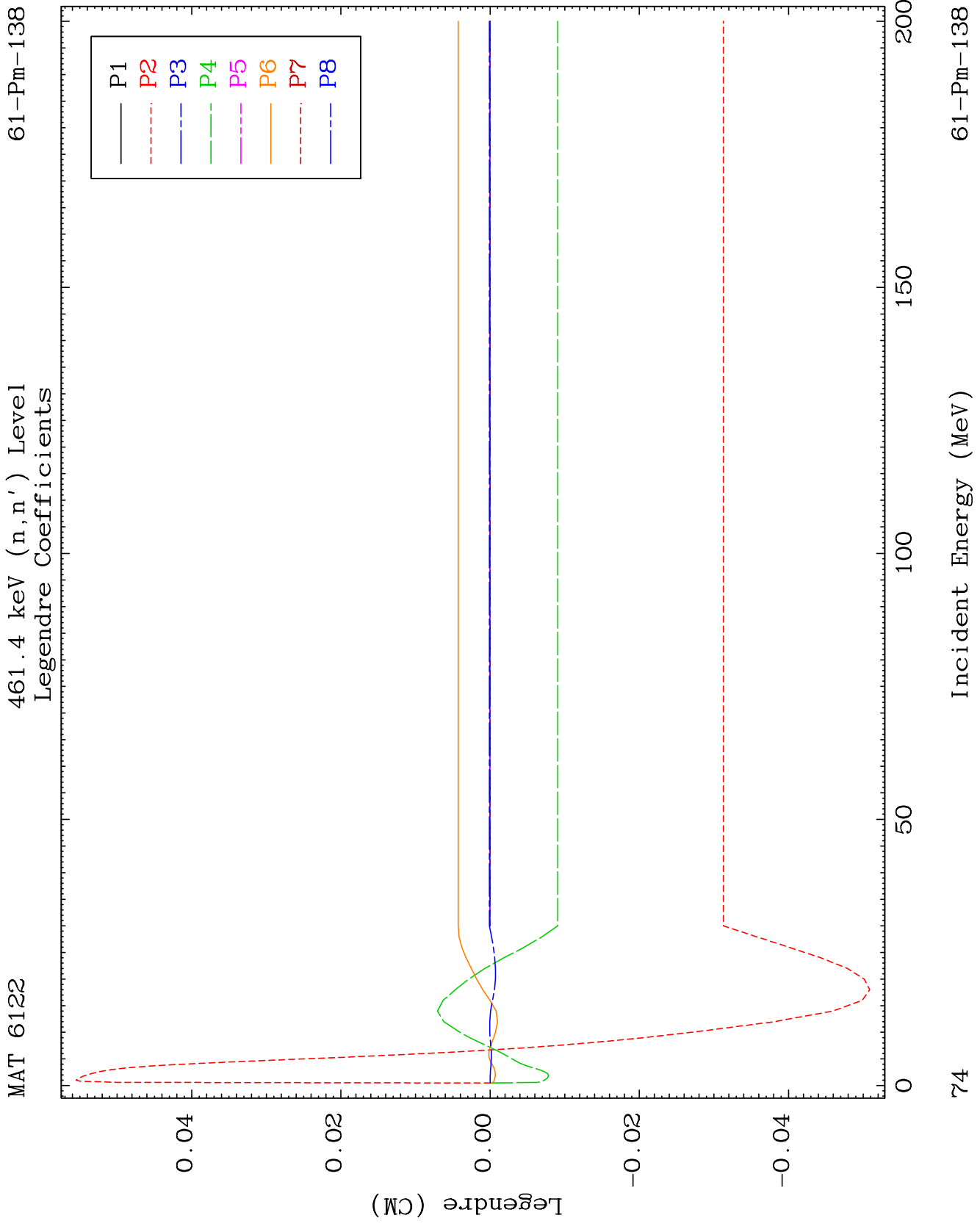


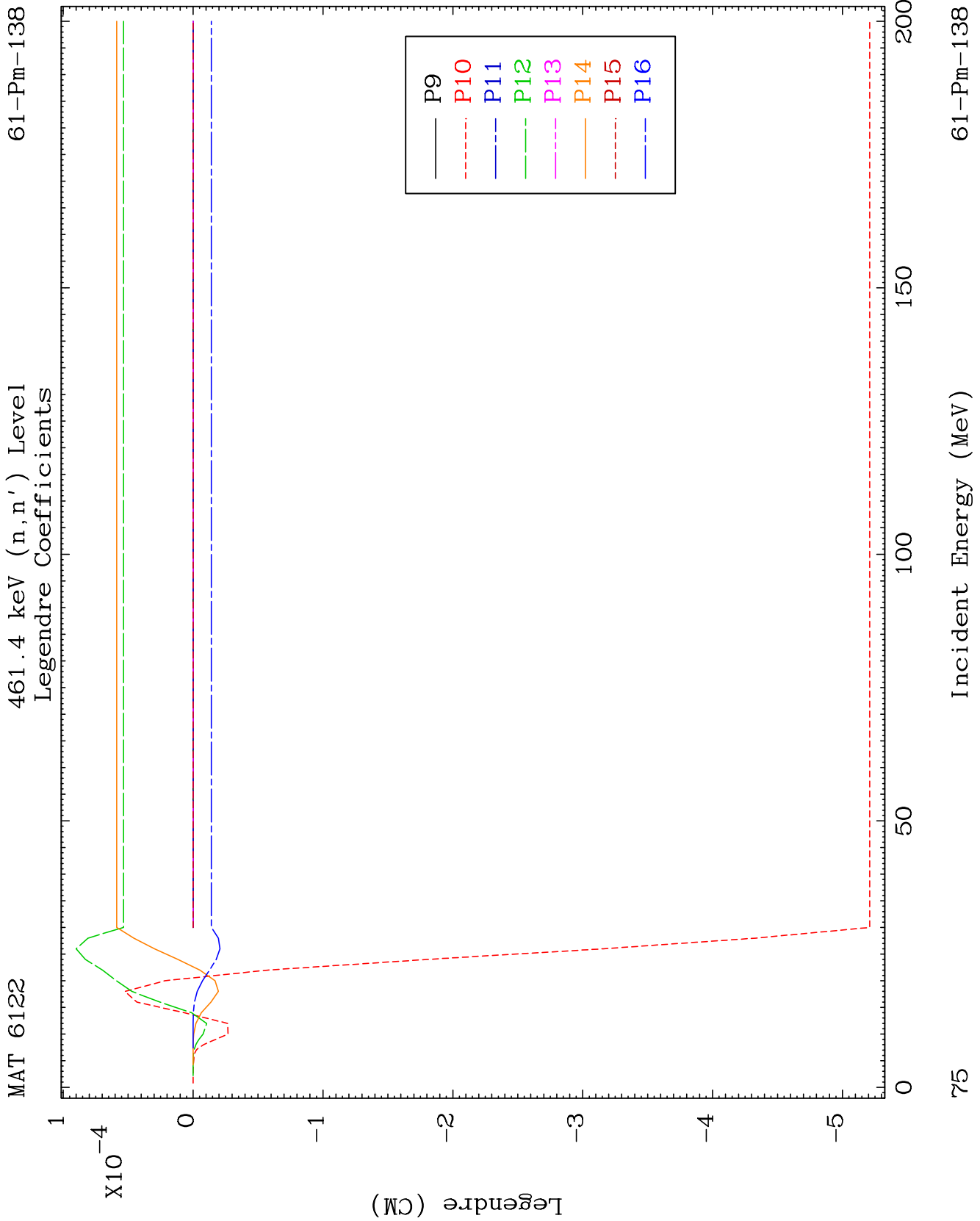
MAT 6122

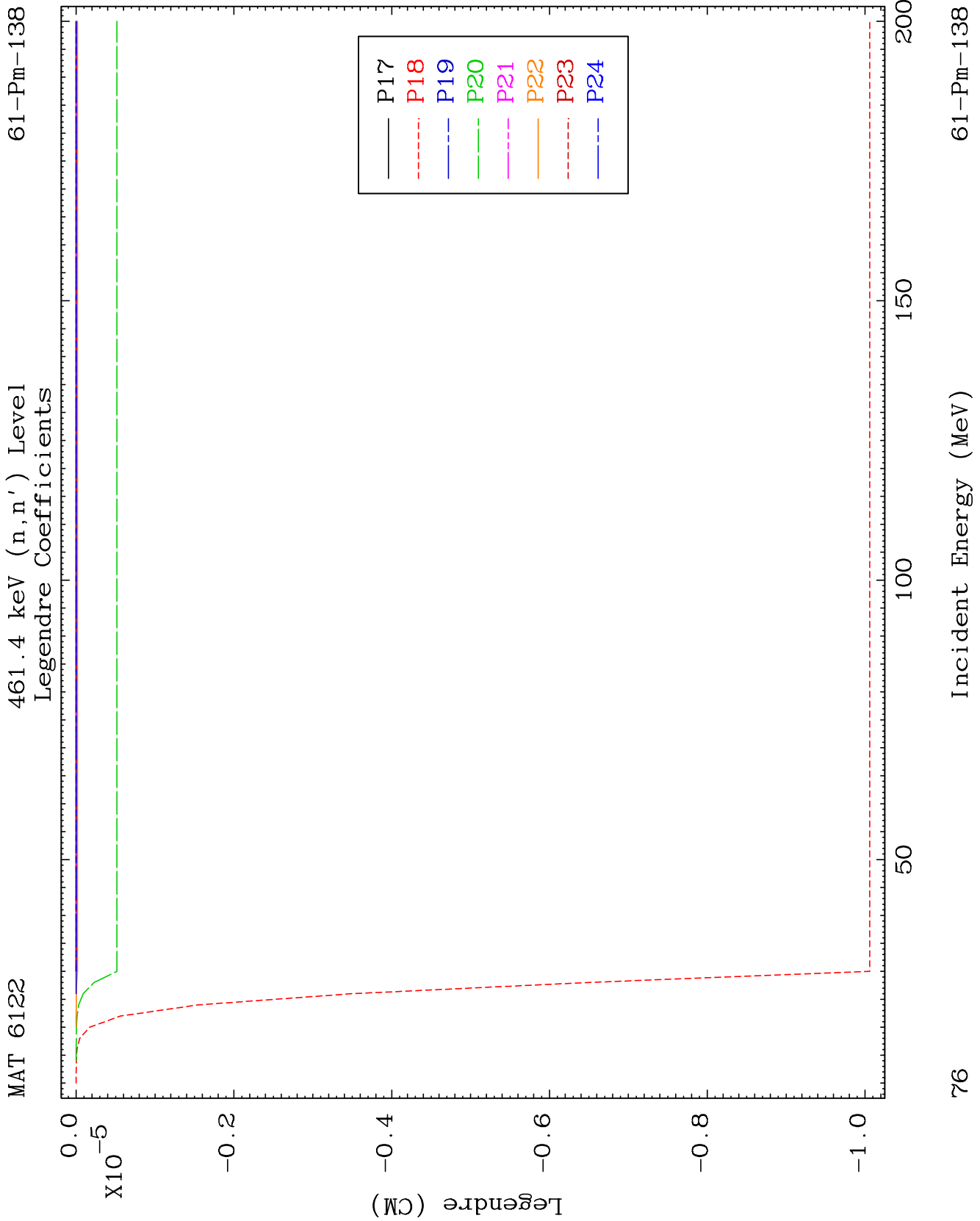
445.6 keV (n,n') Level
Legendre Coefficients

61-Pm-138





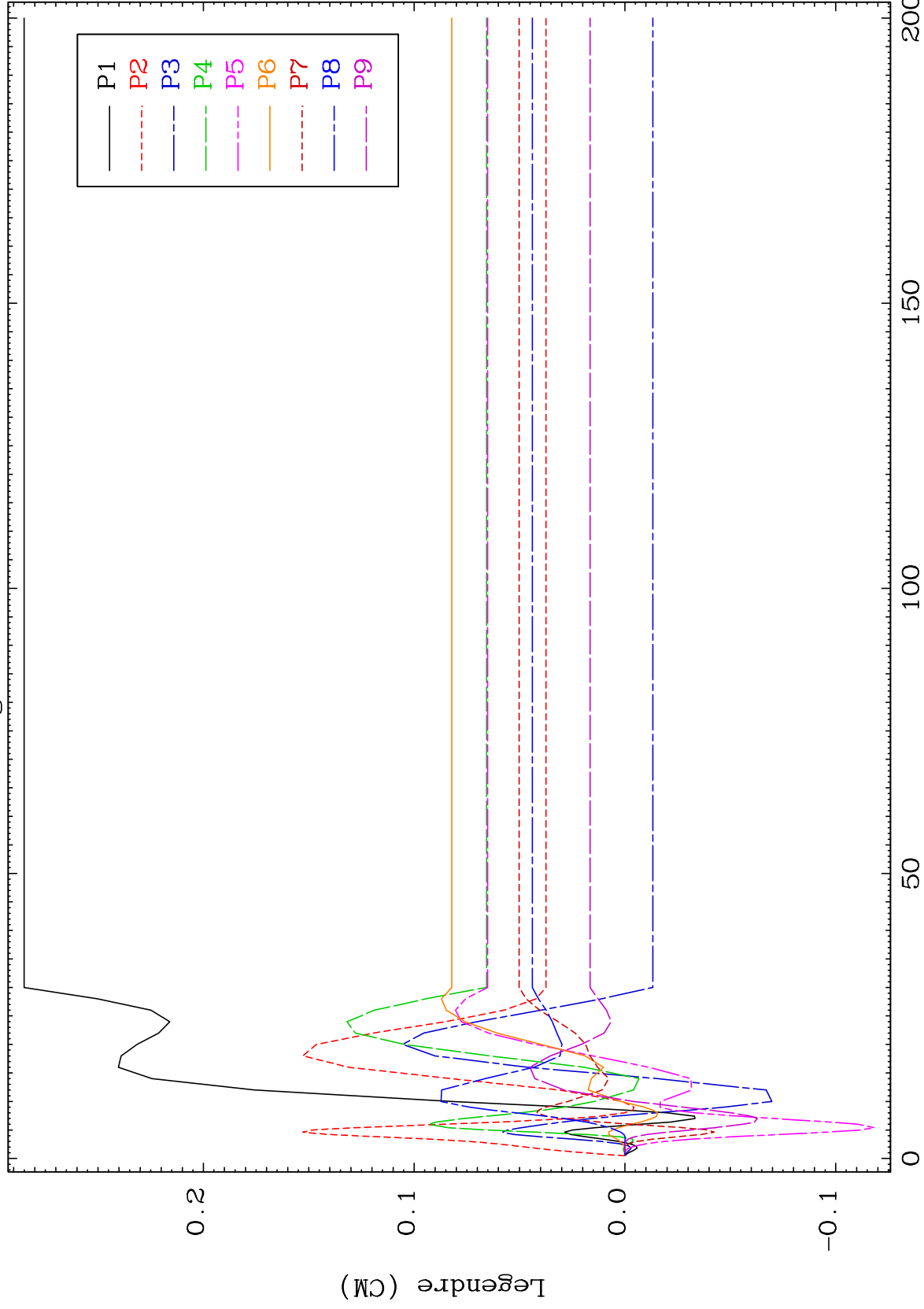




MAT 6122

476.2 keV (n,n') Level
Legendre Coefficients

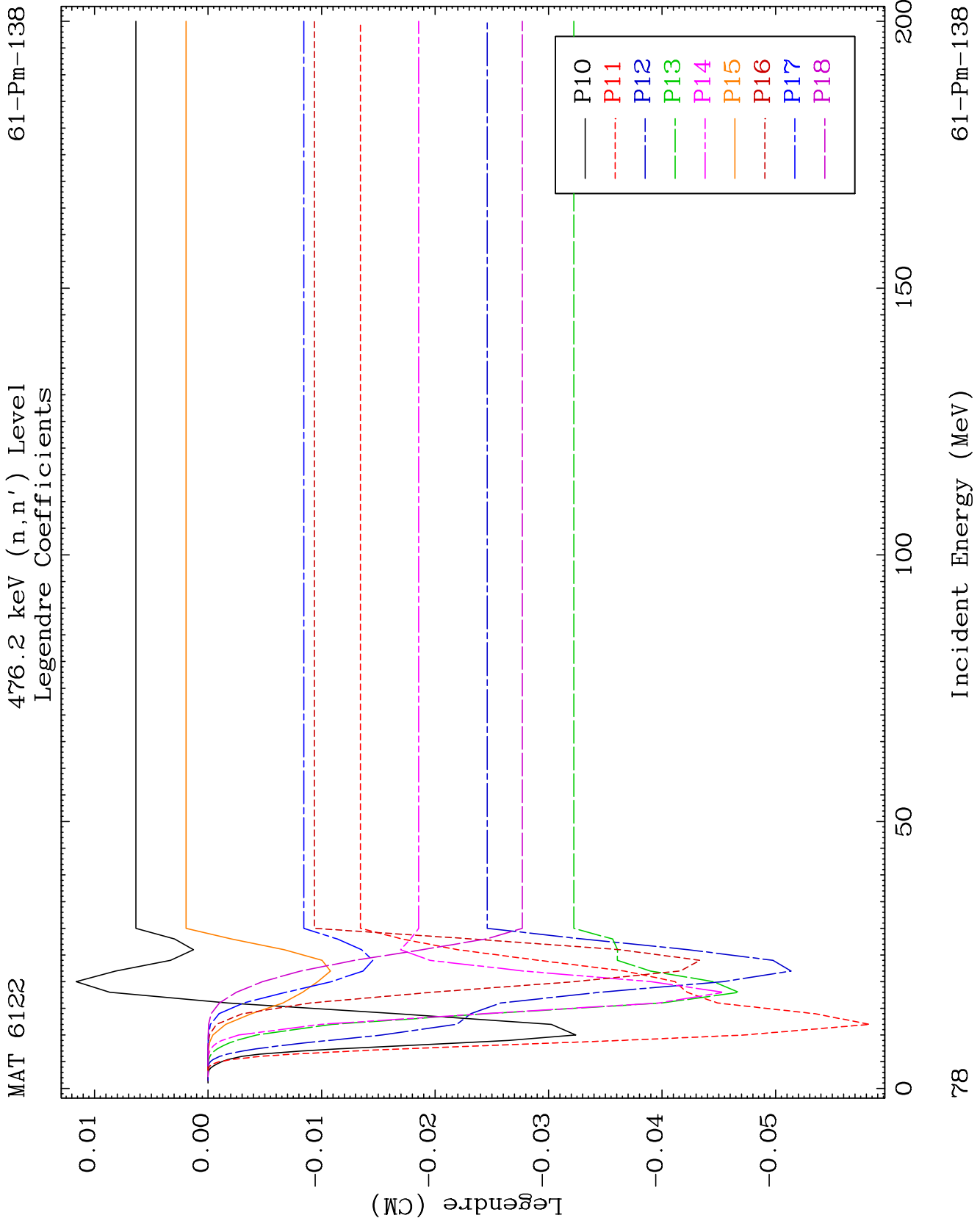
61-Pm-138

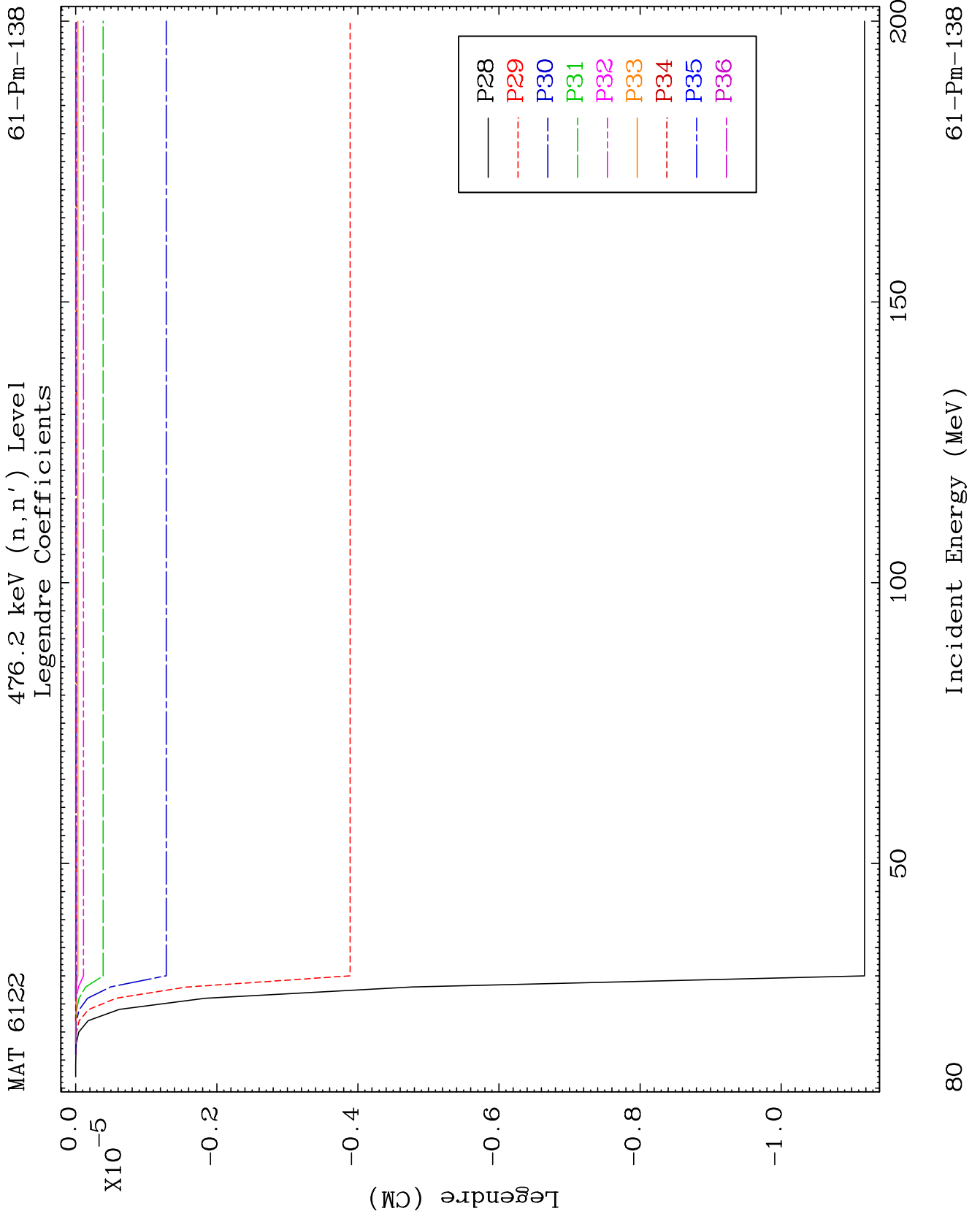


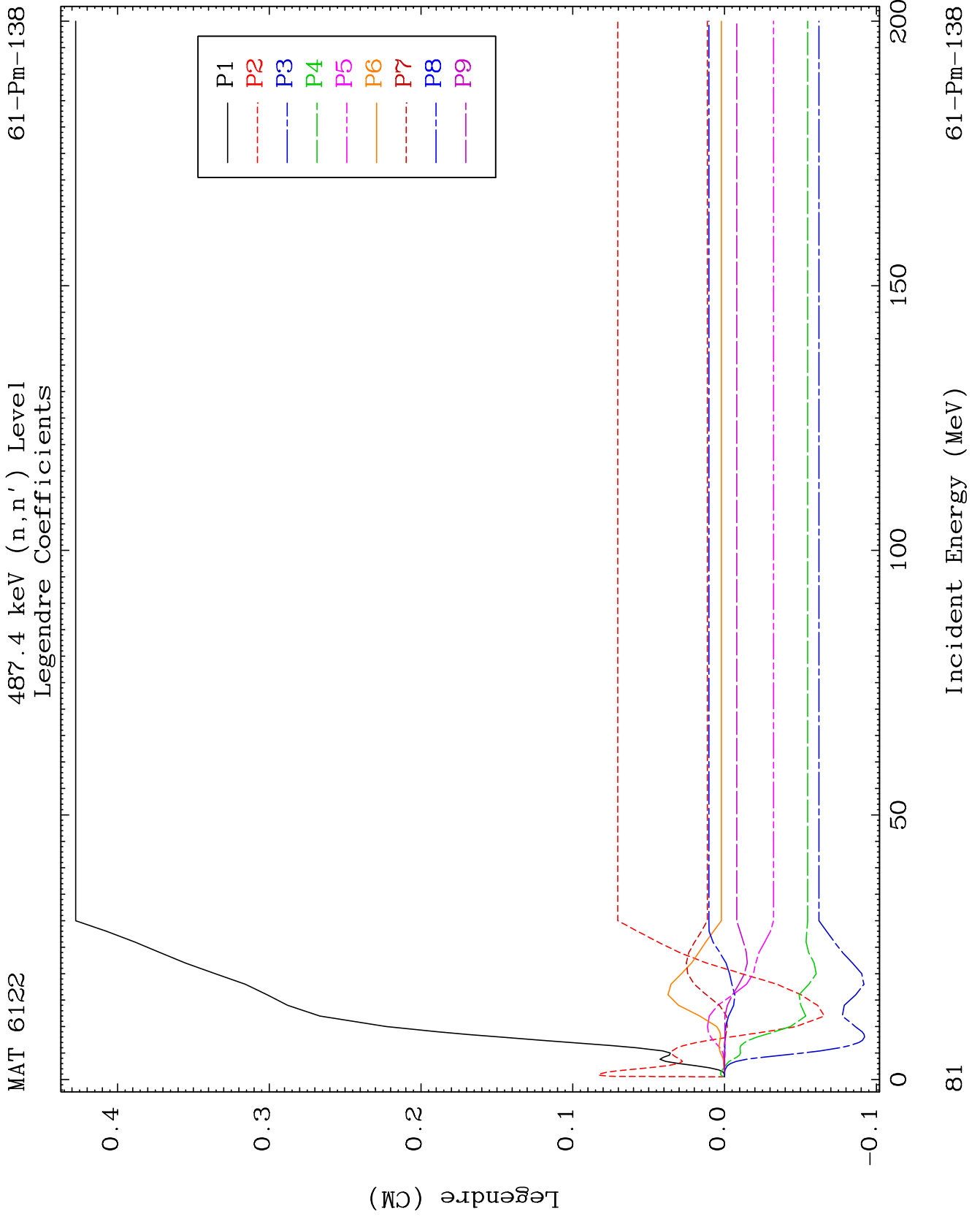
77

Incident Energy (MeV)

61-Pm-138



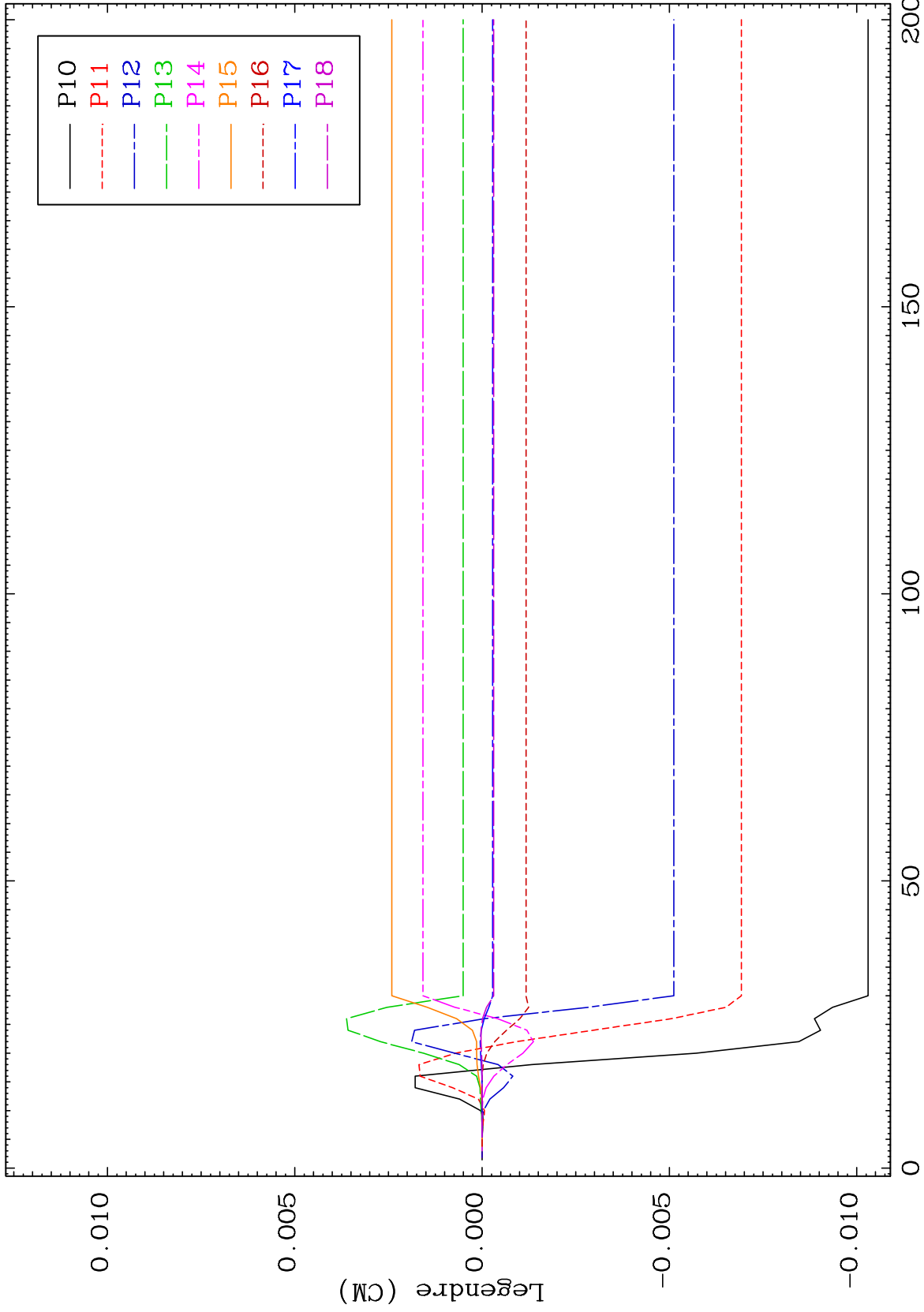




MAT 6122

487.4 keV (n,n') Level
Legendre Coefficients

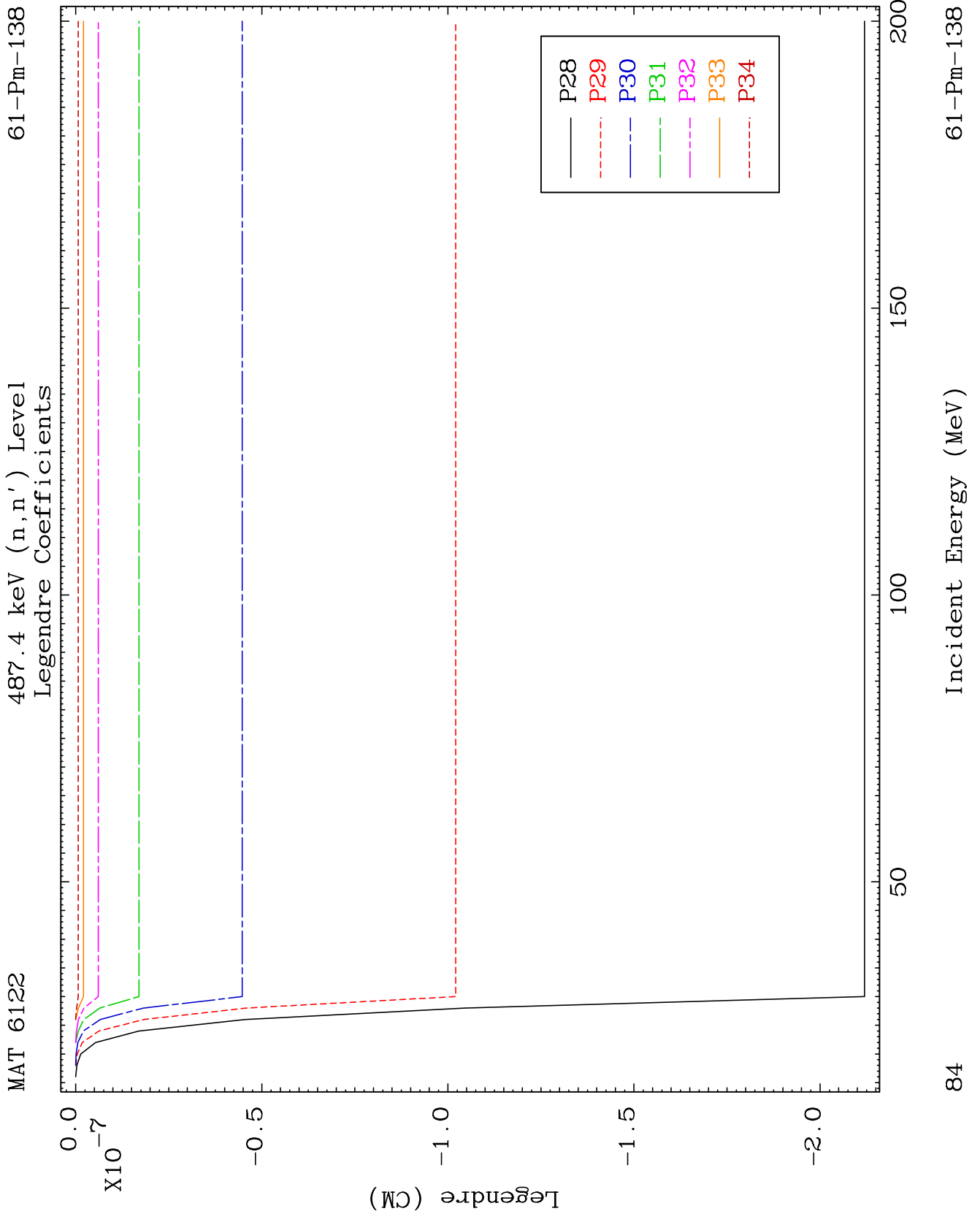
61-Pm-138



82

Incident Energy (MeV)

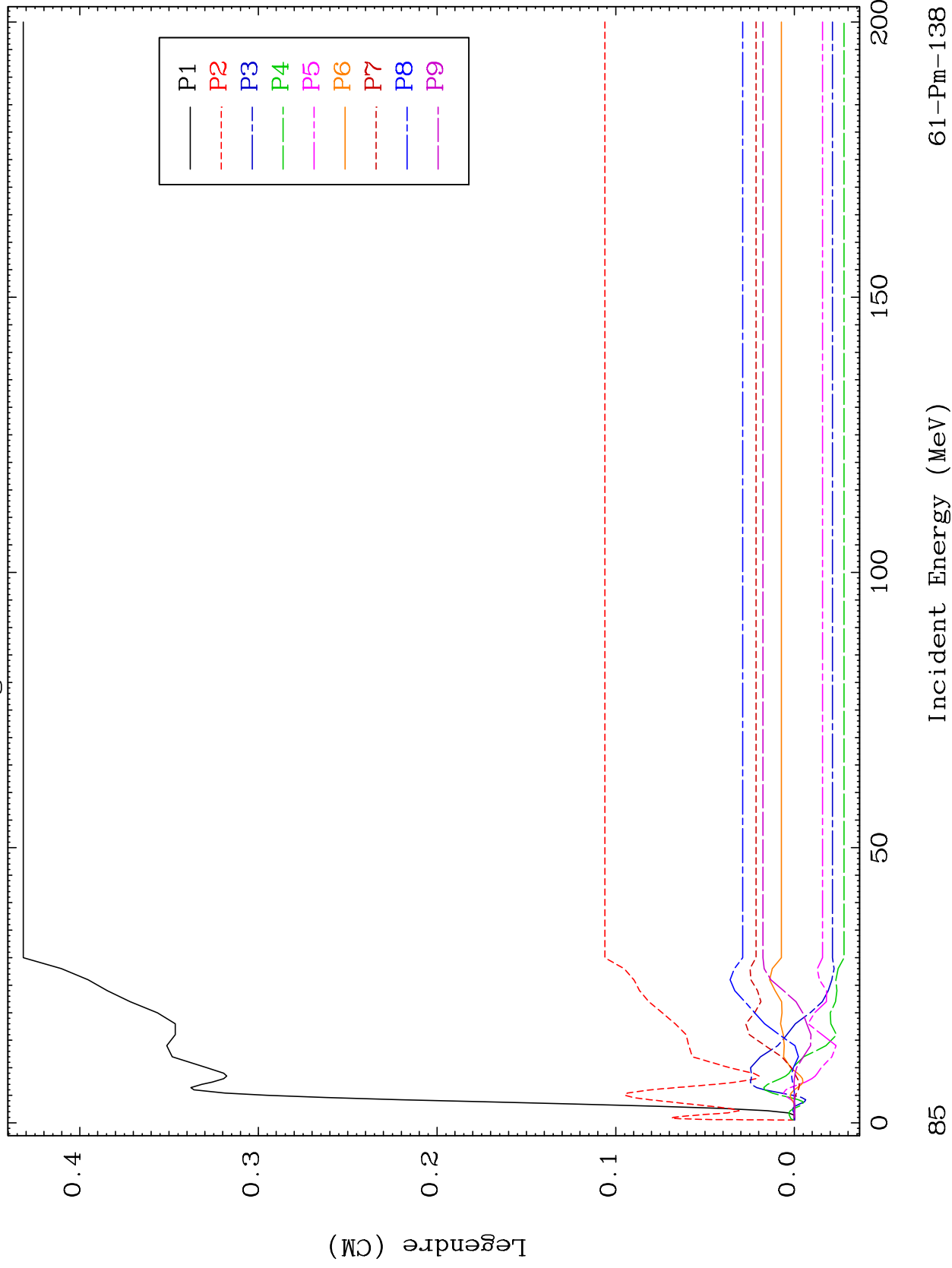
61-Pm-138



MAT 6122

488.8 keV (n,n') Level
Legendre Coefficients

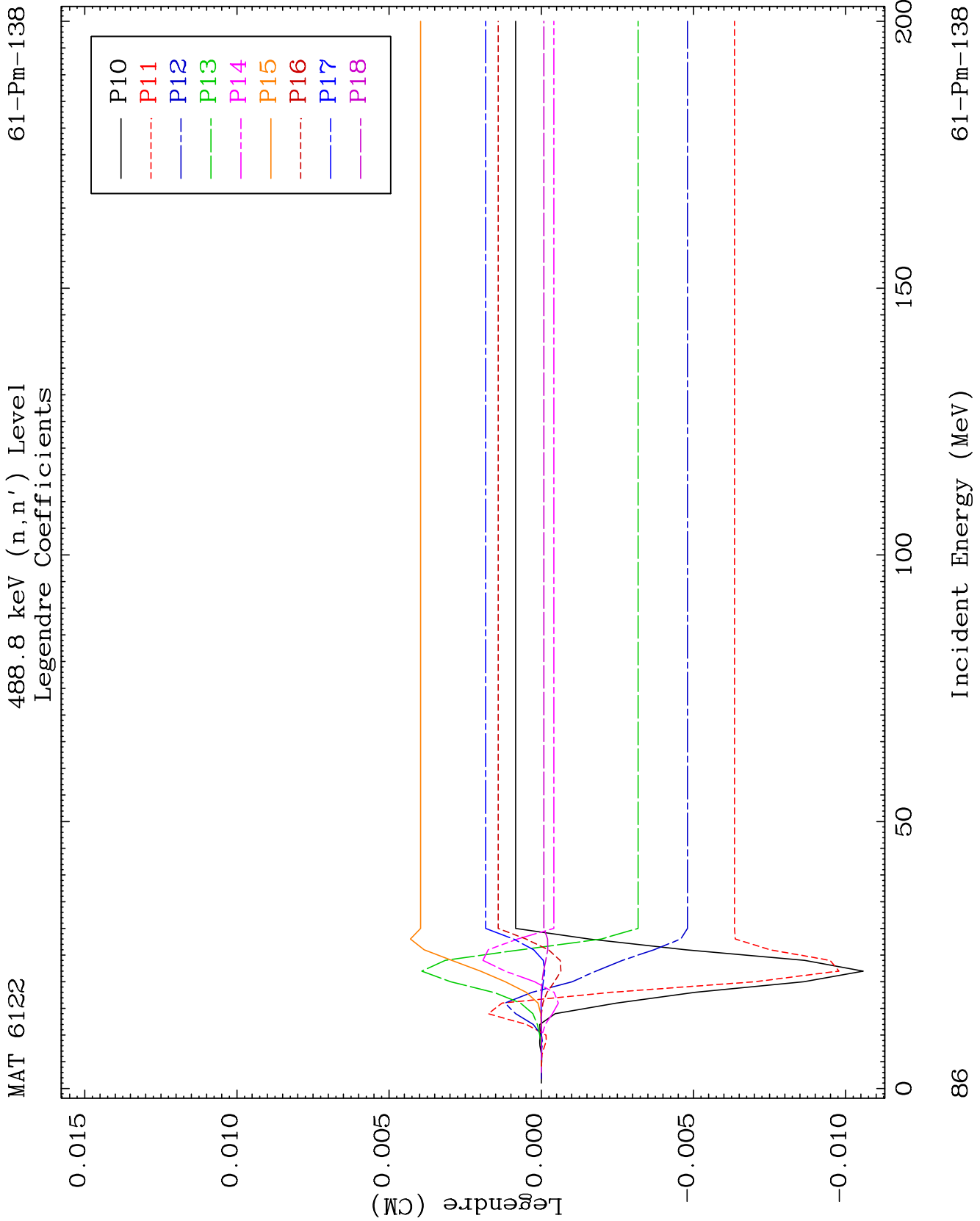
61-Pm-138

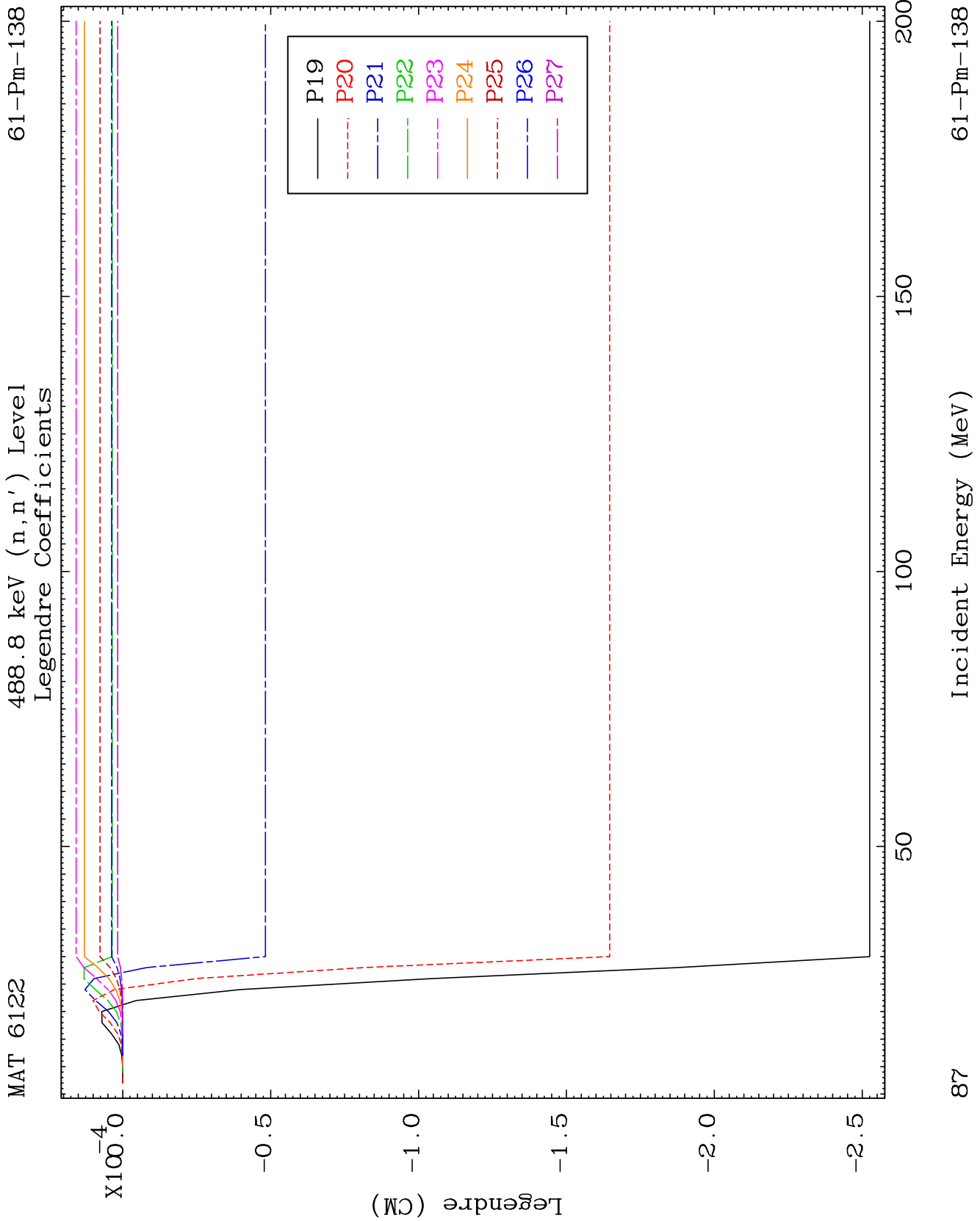


61-Pm-138

Incident Energy (MeV)

85

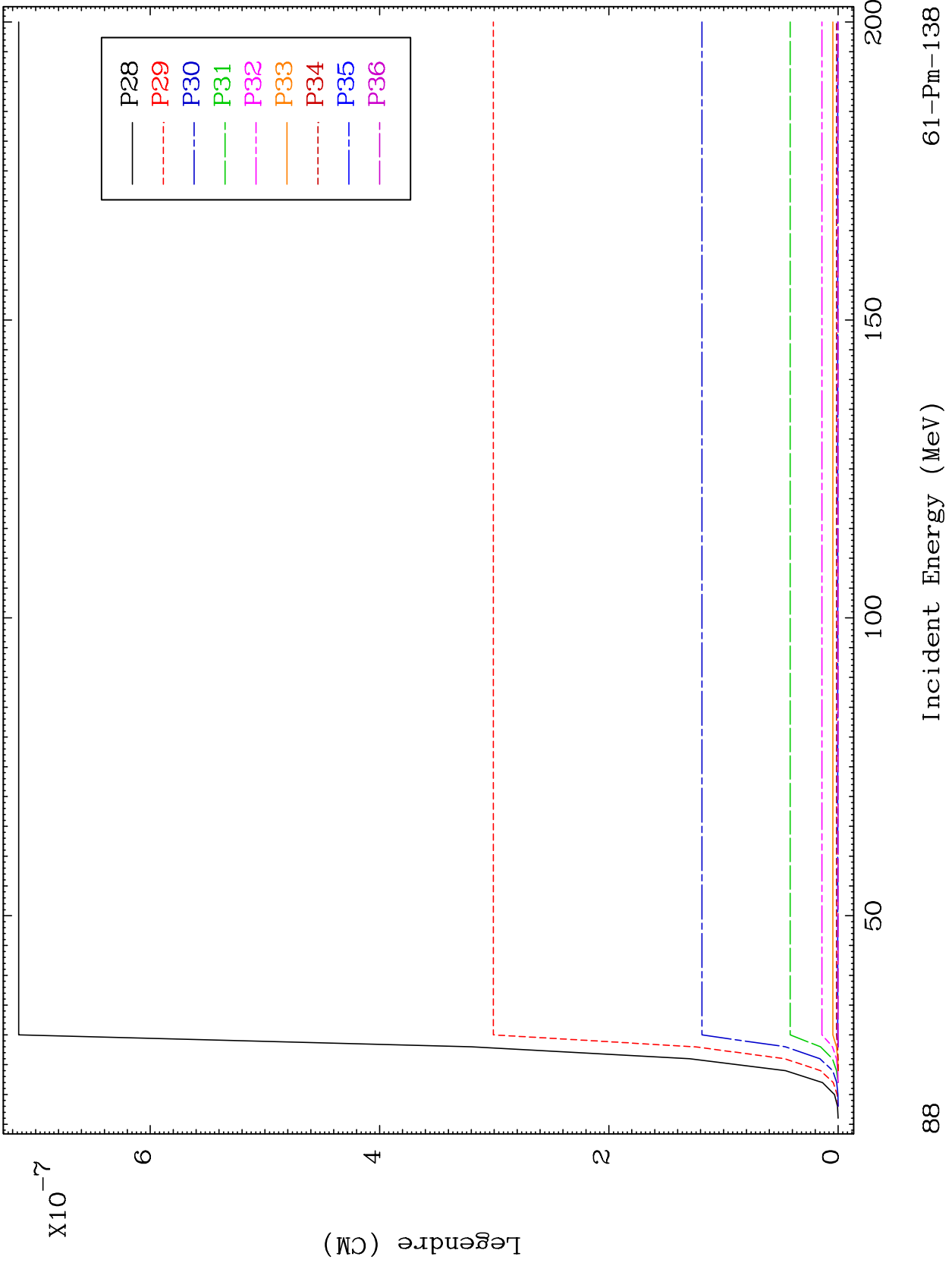




MAT 6122

488.8 keV (n,n') Level
Legendre Coefficients

61-Pm-138



88

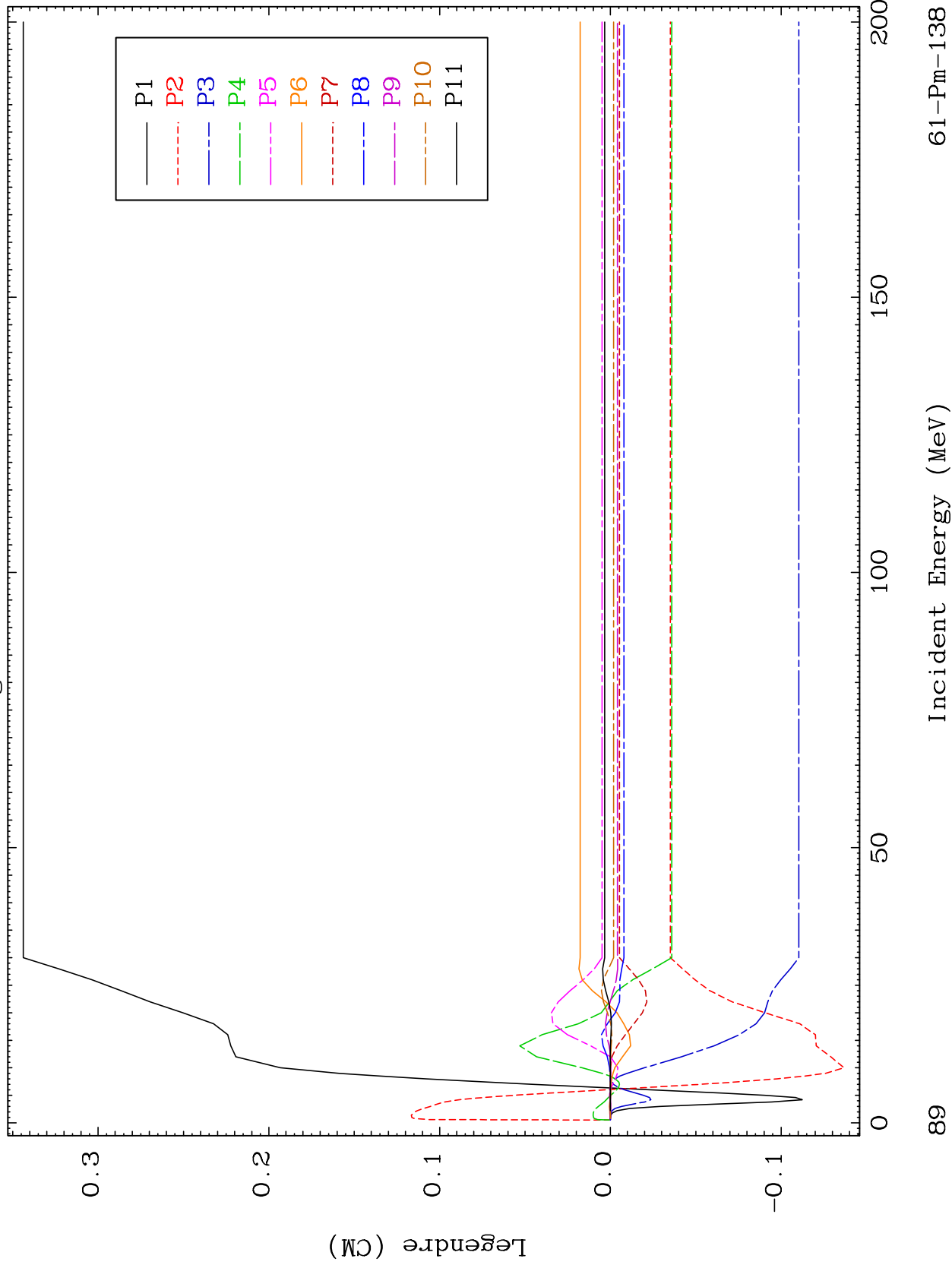
Incident Energy (MeV)

61-Pm-138

MAT 6122

500.8 keV (n,n') Level
Legendre Coefficients

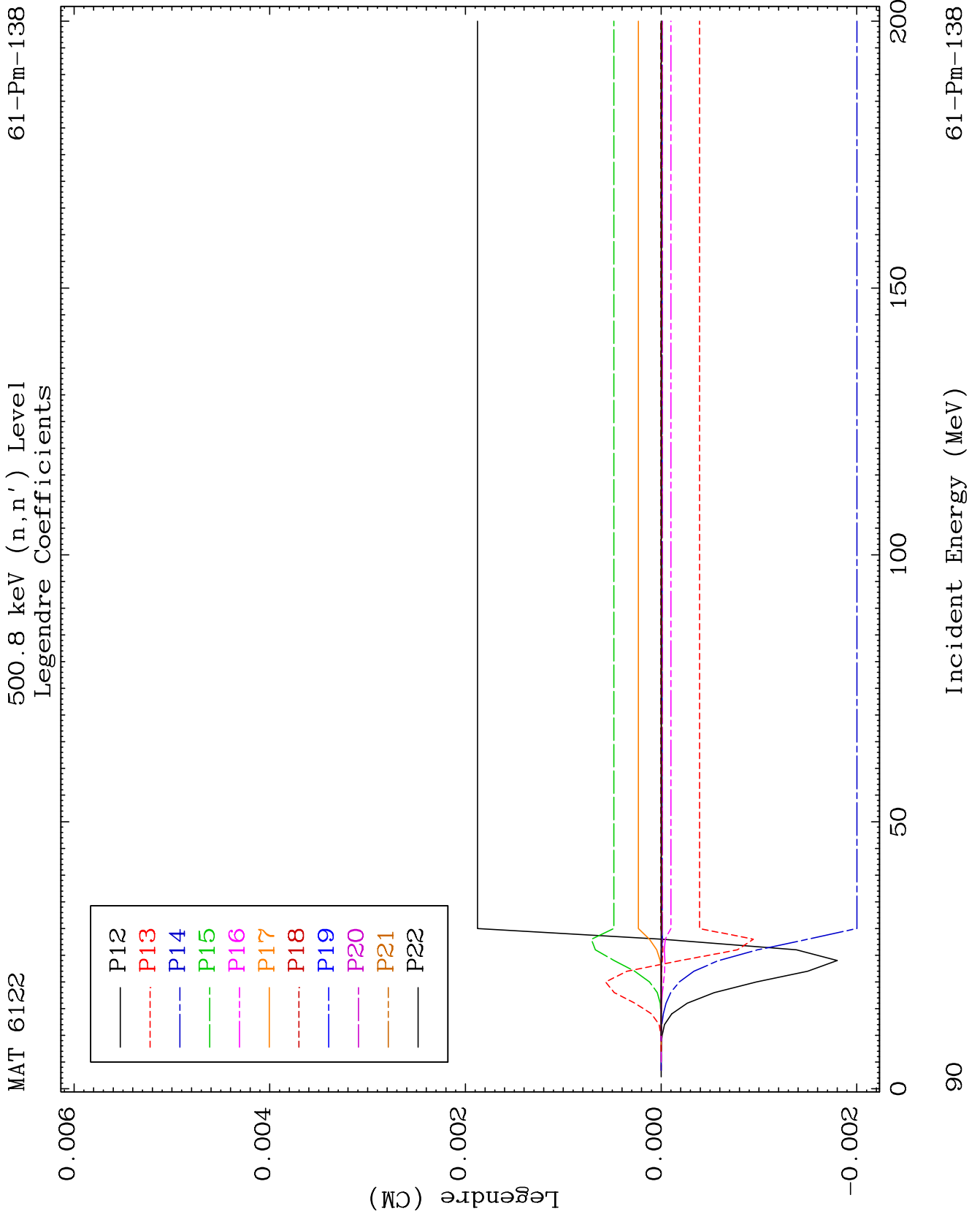
61-Pm-138



89

Incident Energy (MeV)

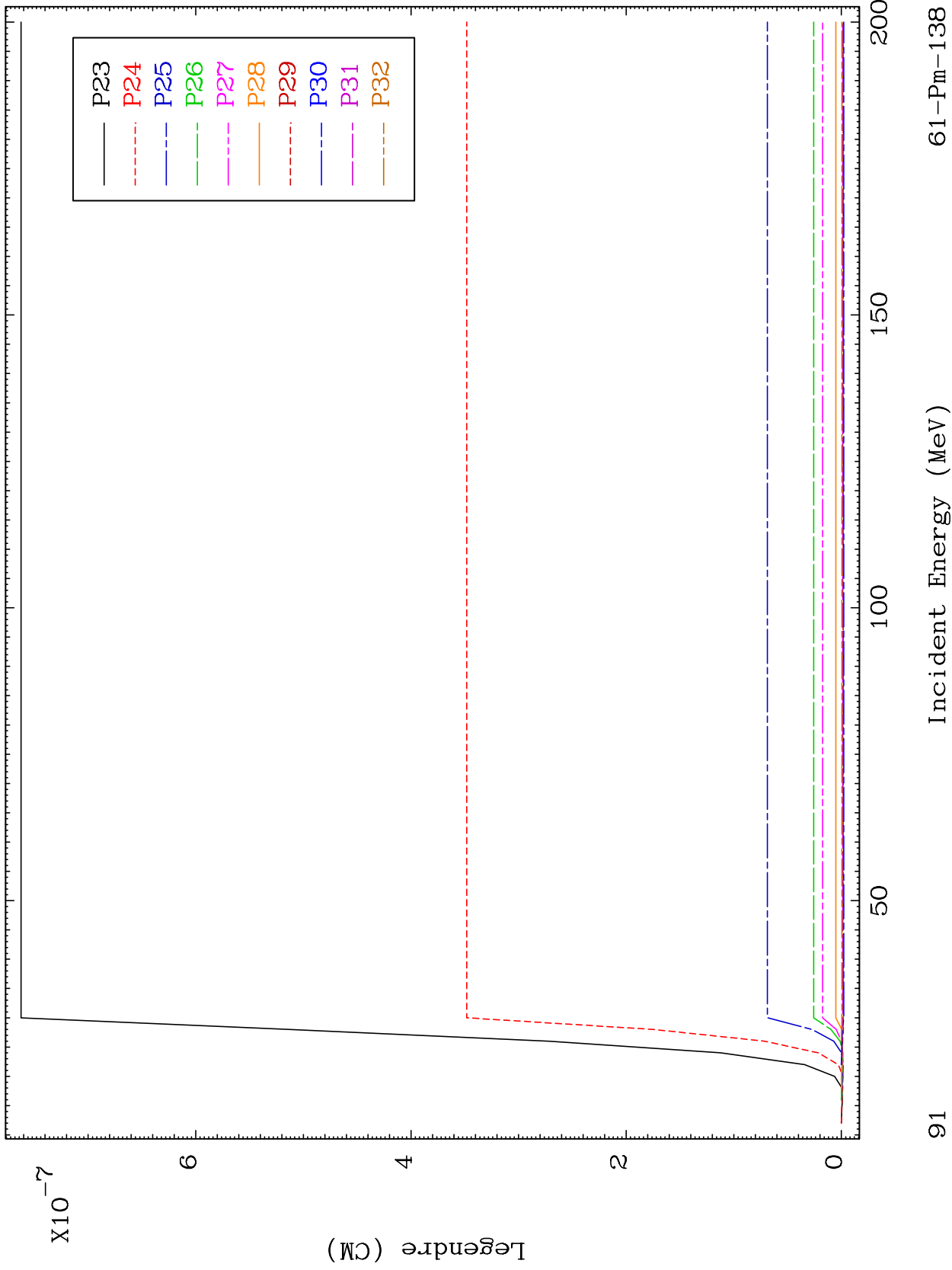
61-Pm-138



MAT 6122

500.8 keV (n, n') Level
Legendre Coefficients

61-Pm-138



91

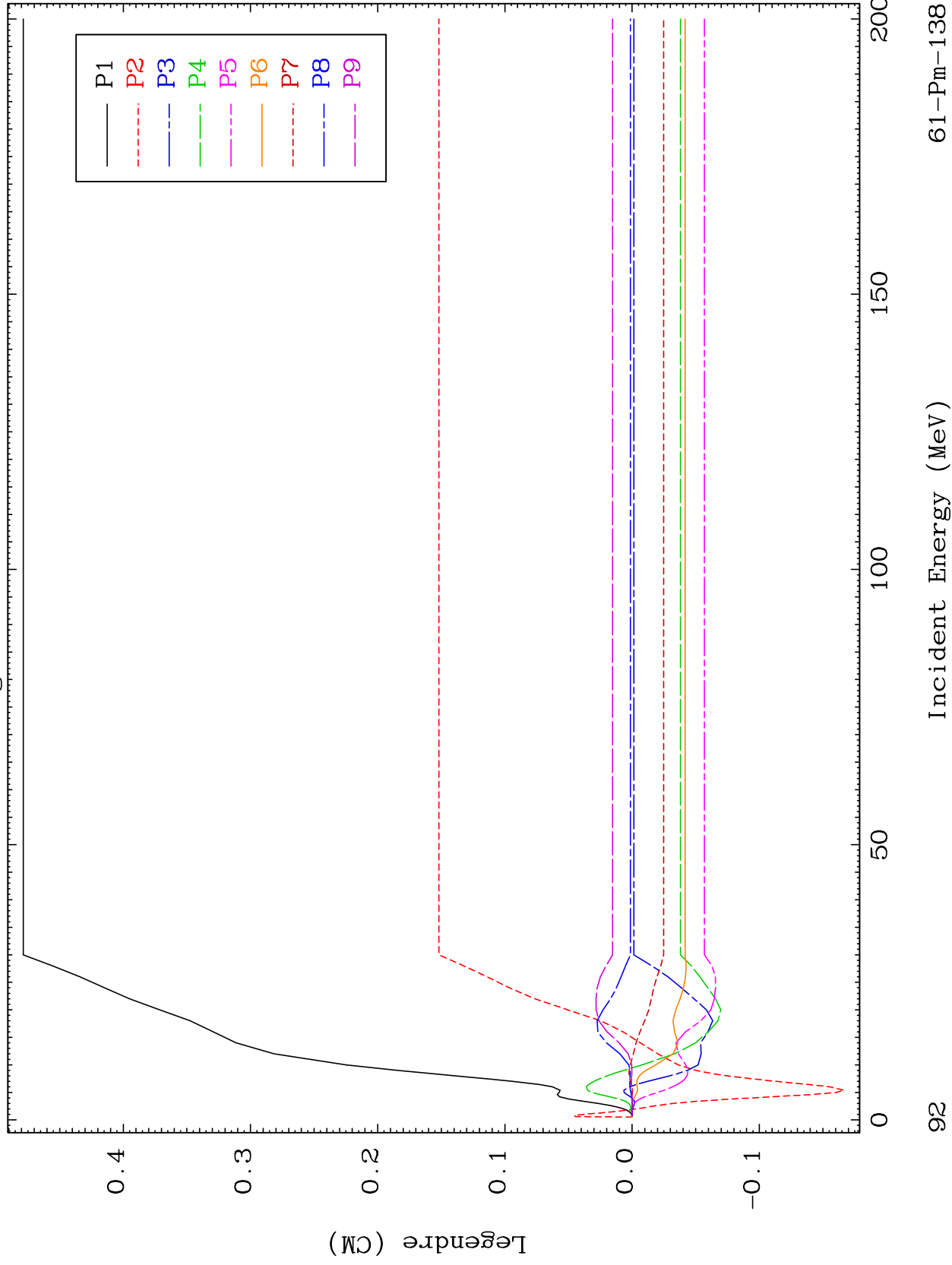
Incident Energy (MeV)

61-Pm-138

MAT 6122

511.9 keV (n,n') Level
Legendre Coefficients

61-Pm-138



92

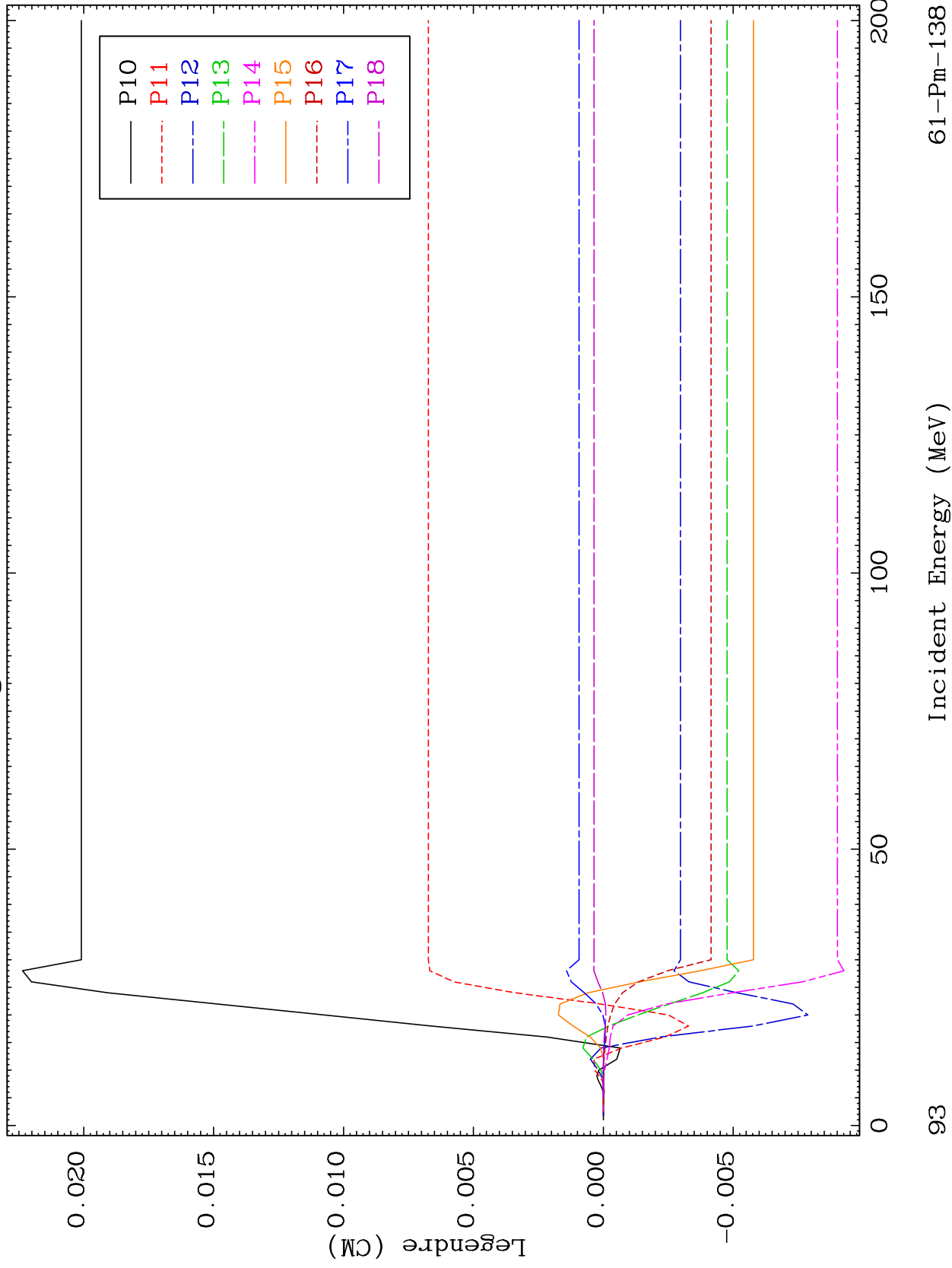
Incident Energy (MeV)

61-Pm-138

MAT 6122

511.9 keV (n,n') Level
Legendre Coefficients

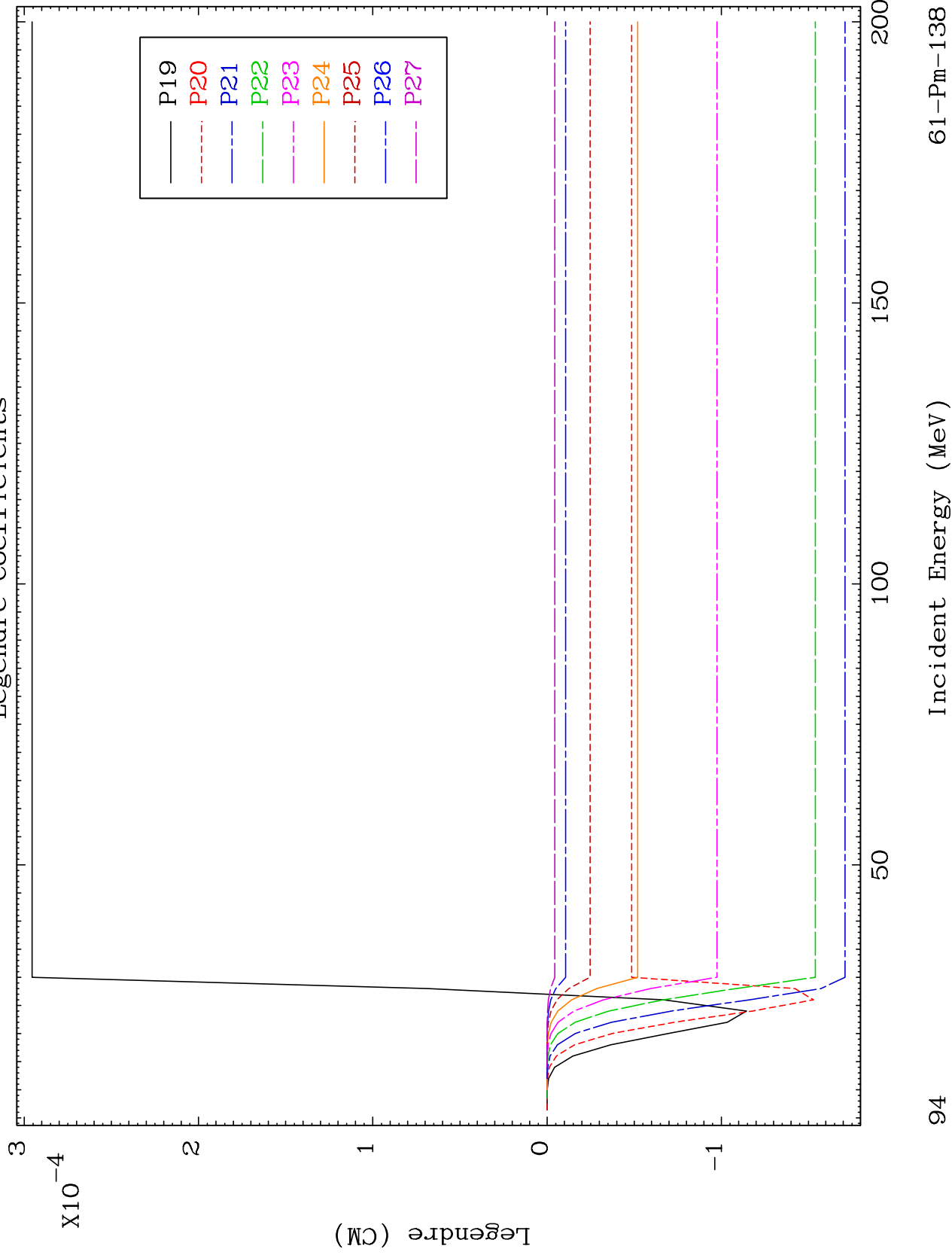
61-Pm-138

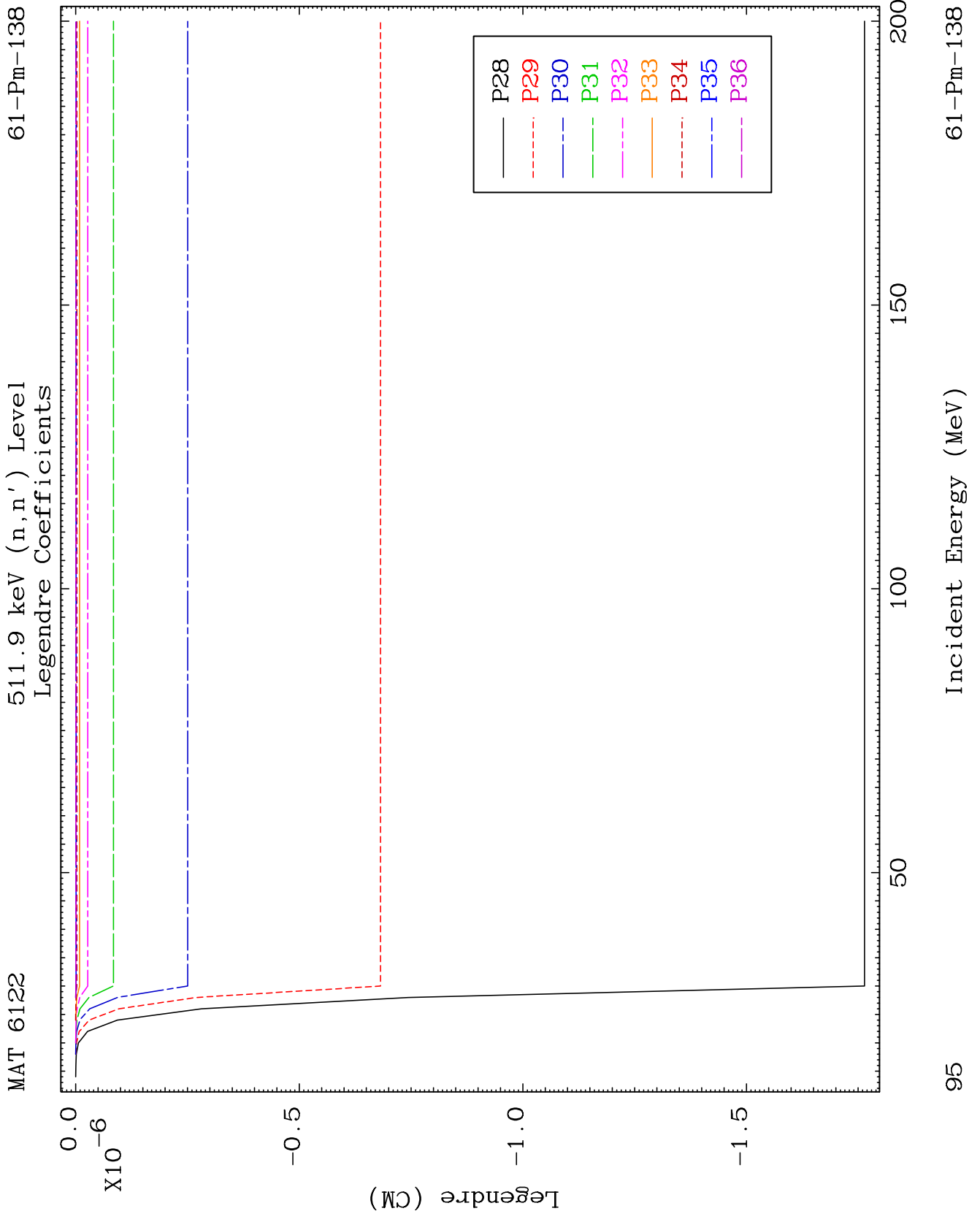


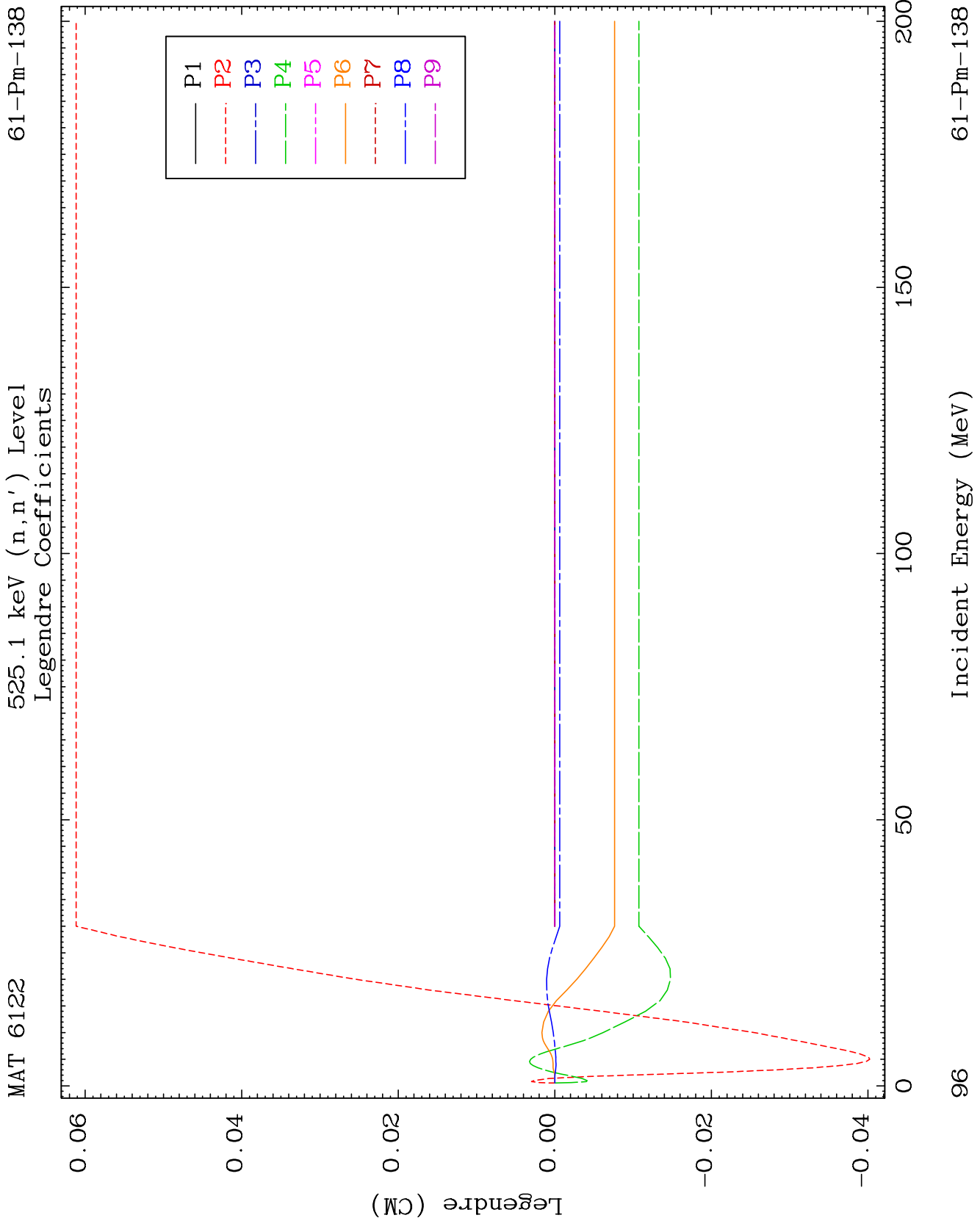
93

Incident Energy (MeV)

61-Pm-138



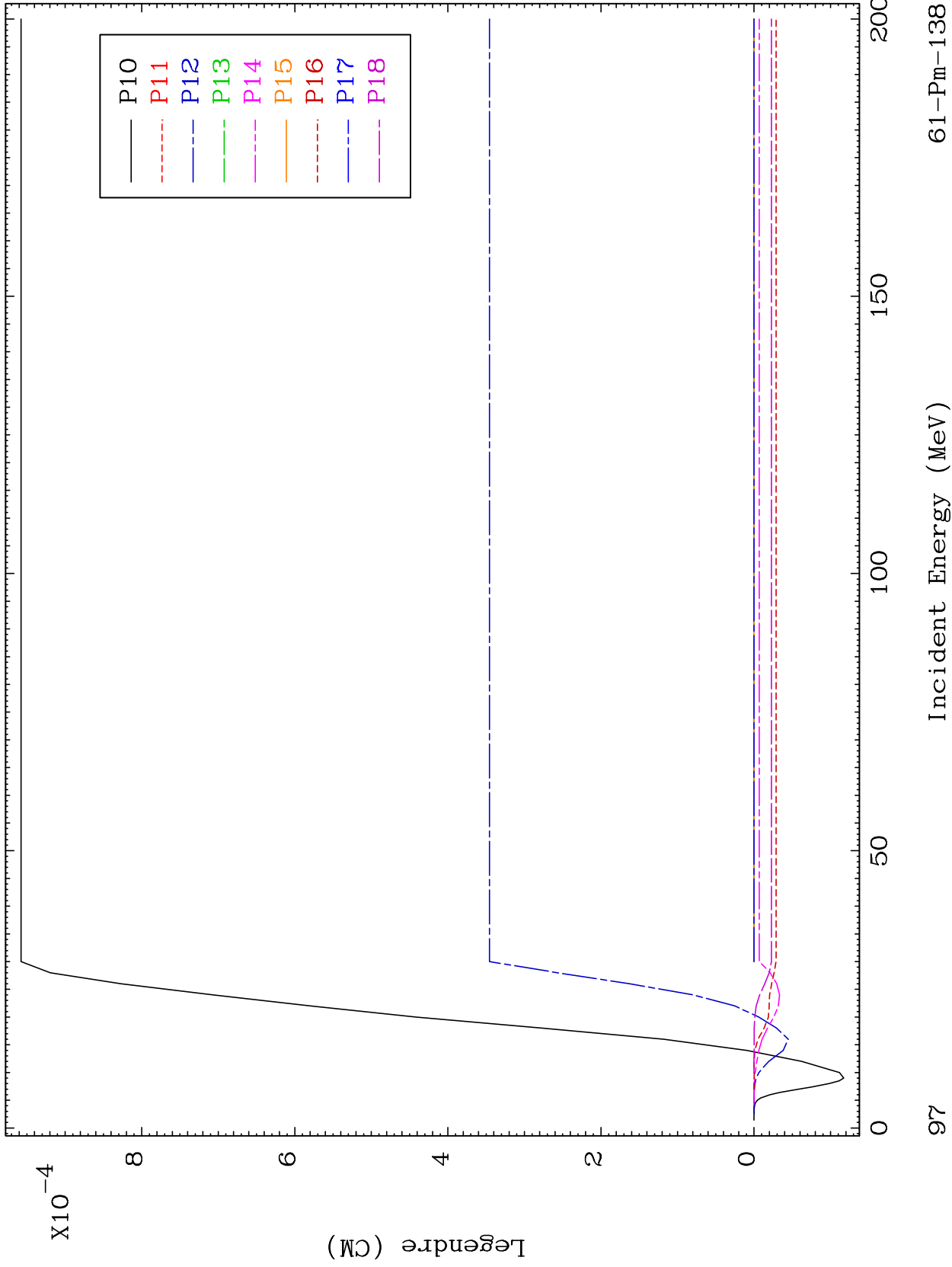


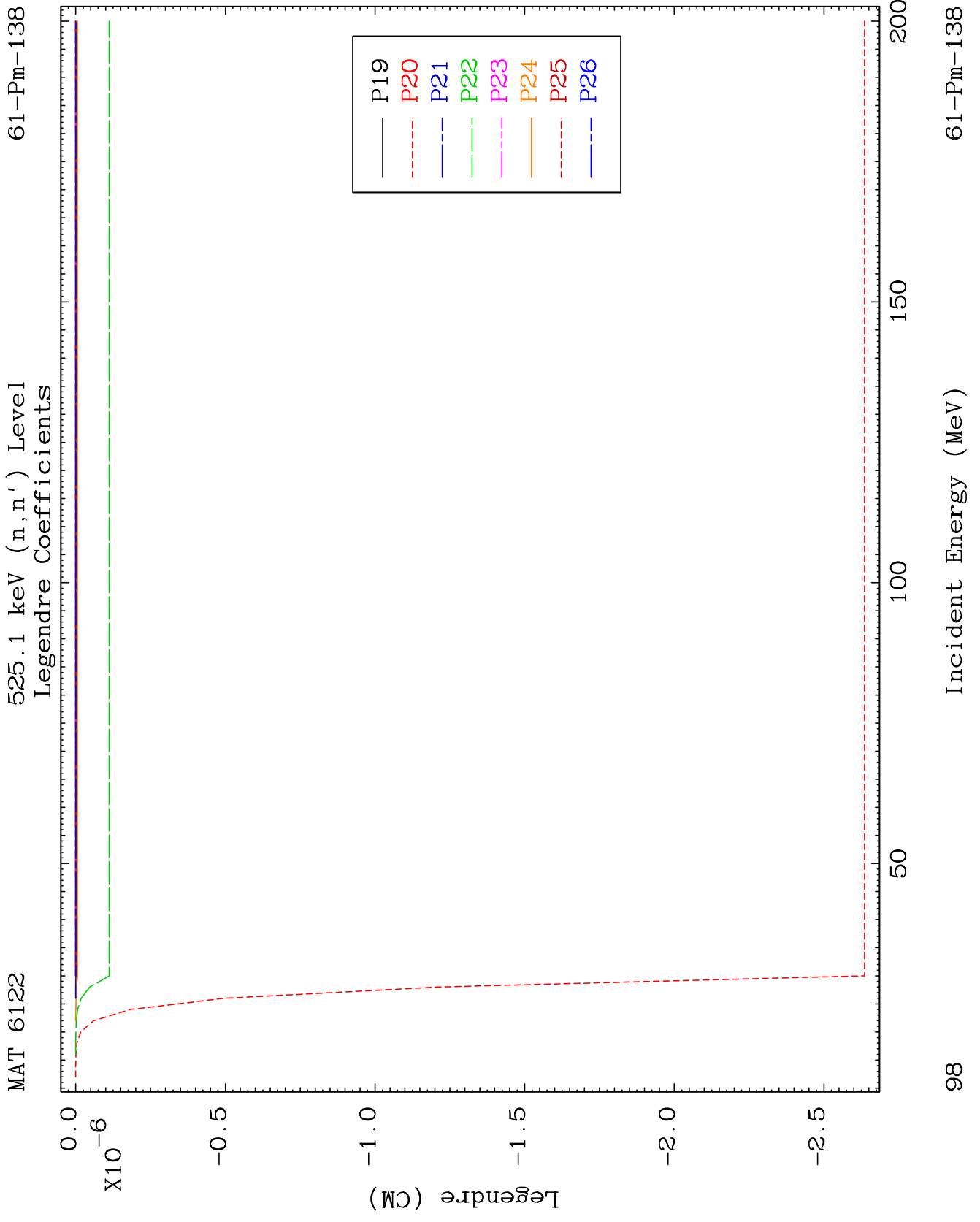


MAT 6122

525.1 keV (n,n') Level
Legendre Coefficients

61-Pm-138

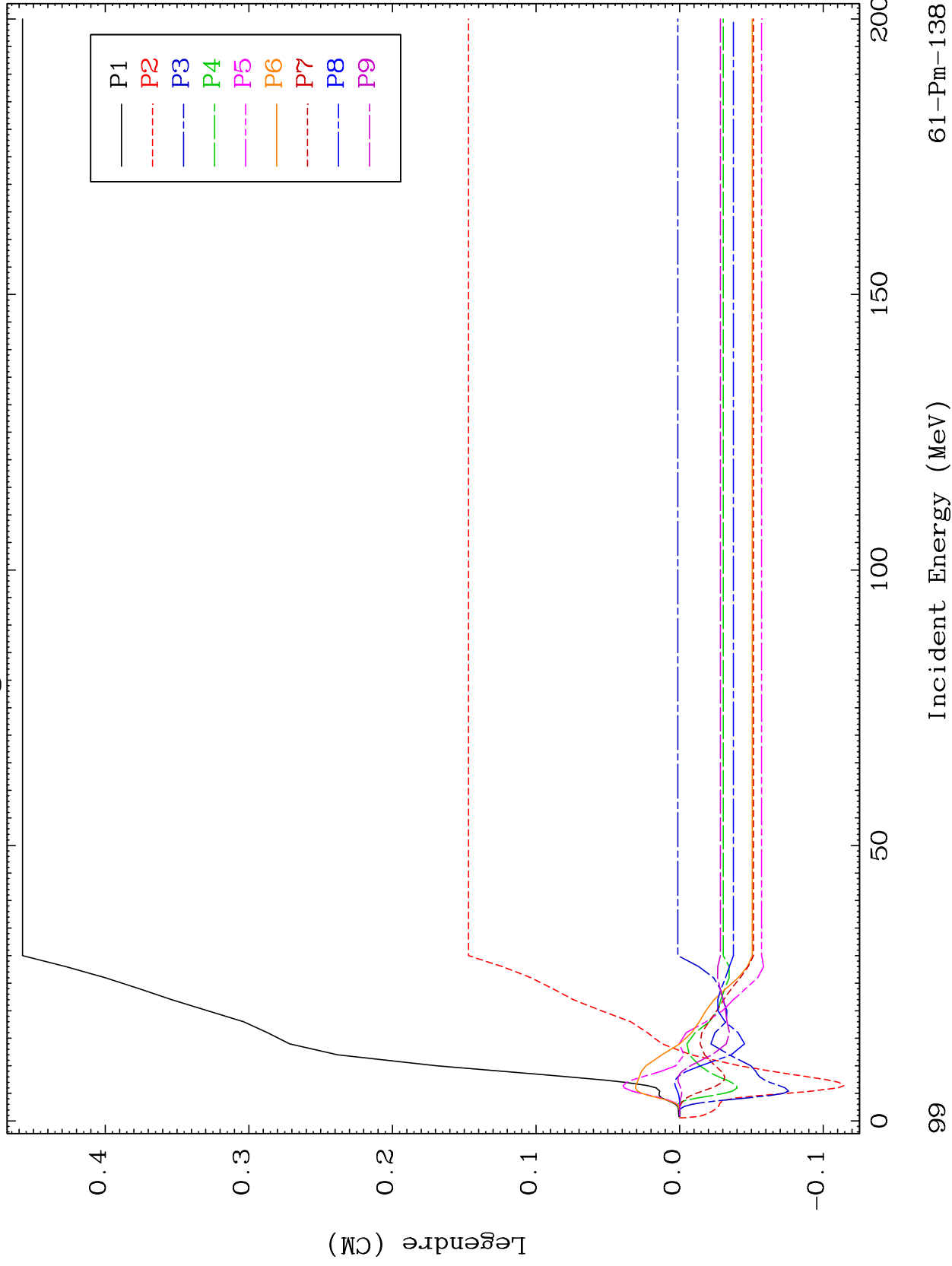




MAT 6122

531.1 keV (n,n') Level
Legendre Coefficients

61-Pm-138



61-Pm-138

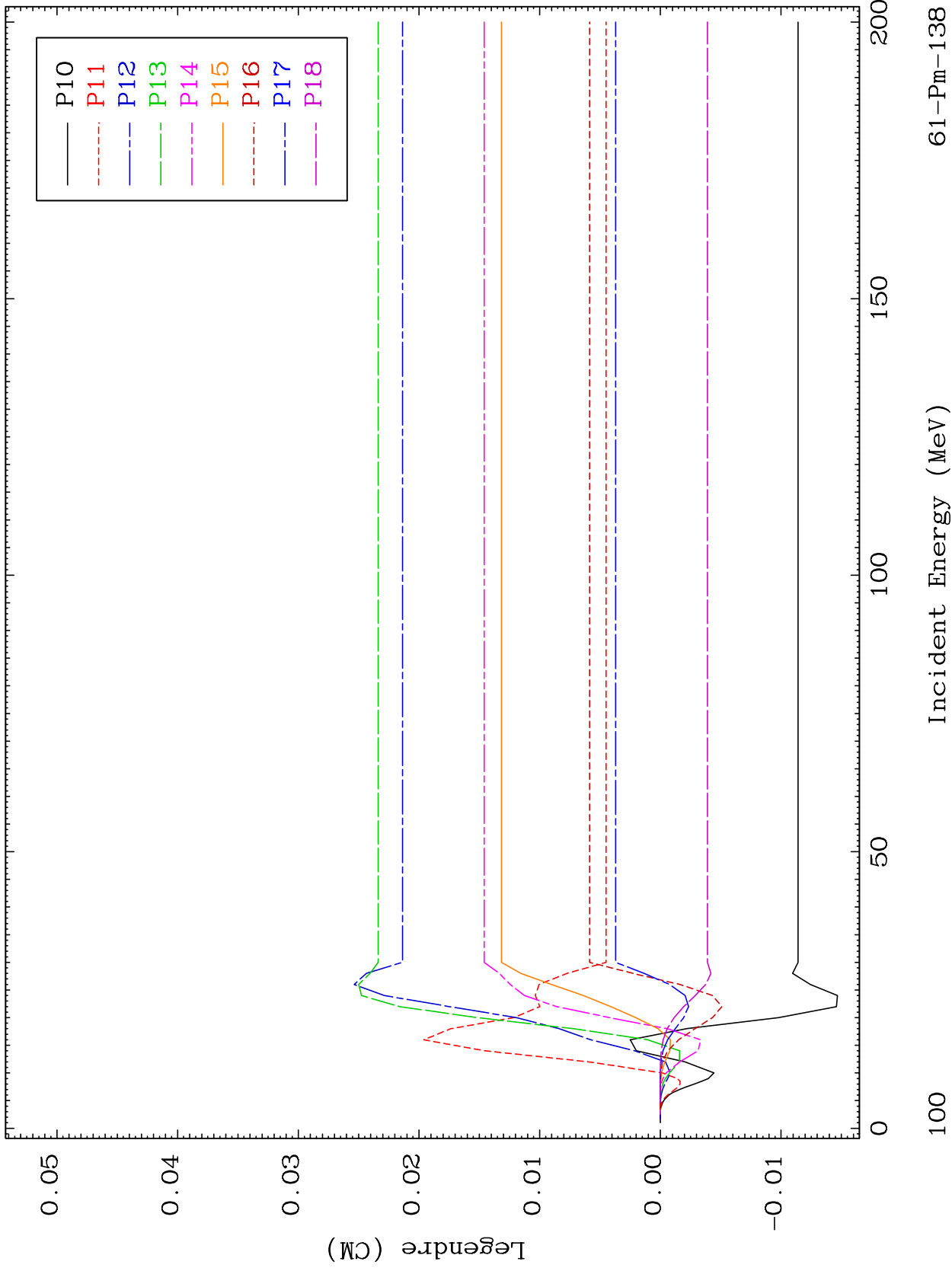
Incident Energy (MeV)

99

MAT 6122

531.1 keV (n,n') Level
Legendre Coefficients

61-Pm-138

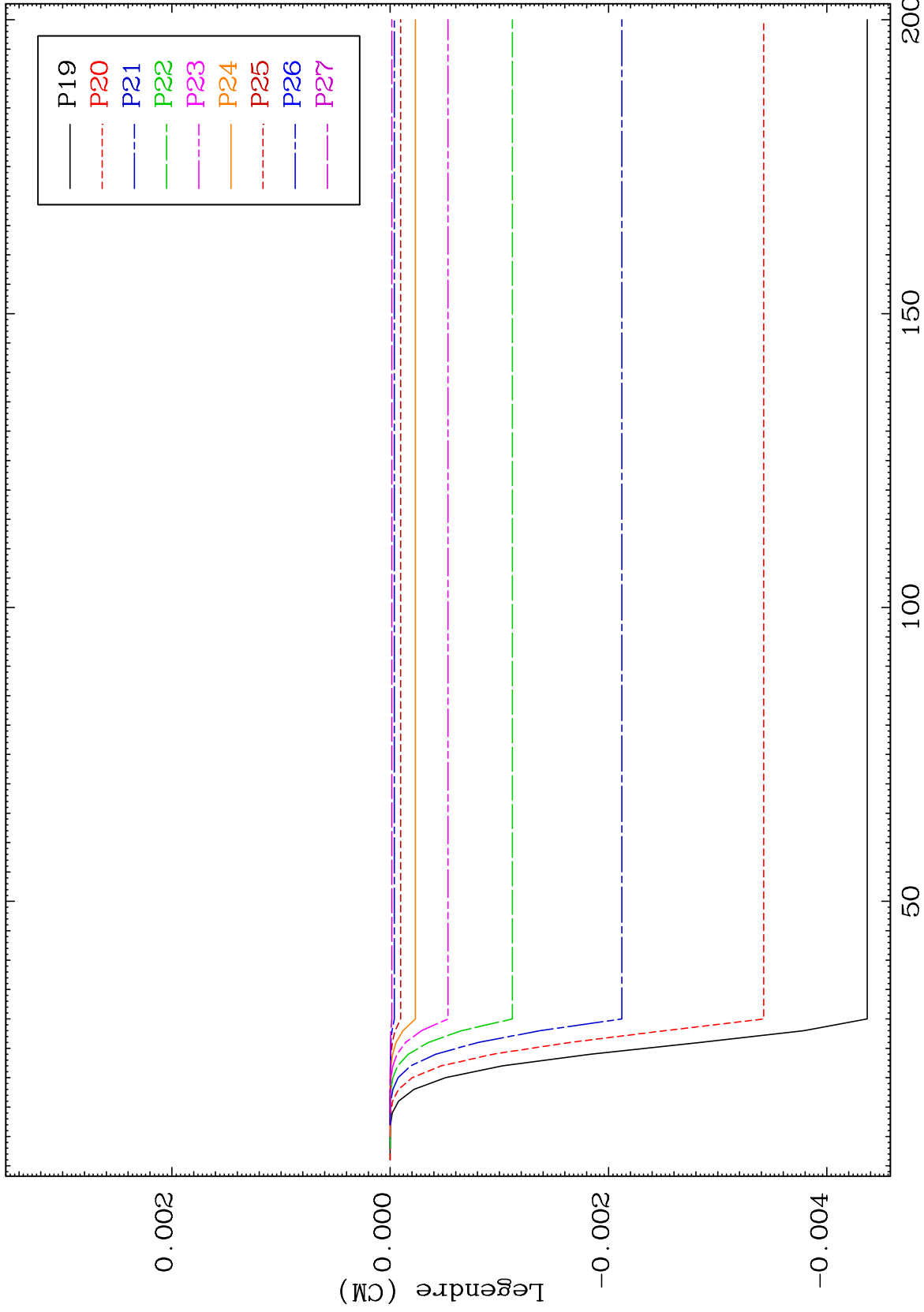


61-Pm-138

MAT 6122

531.1 keV (n,n') Level
Legendre Coefficients

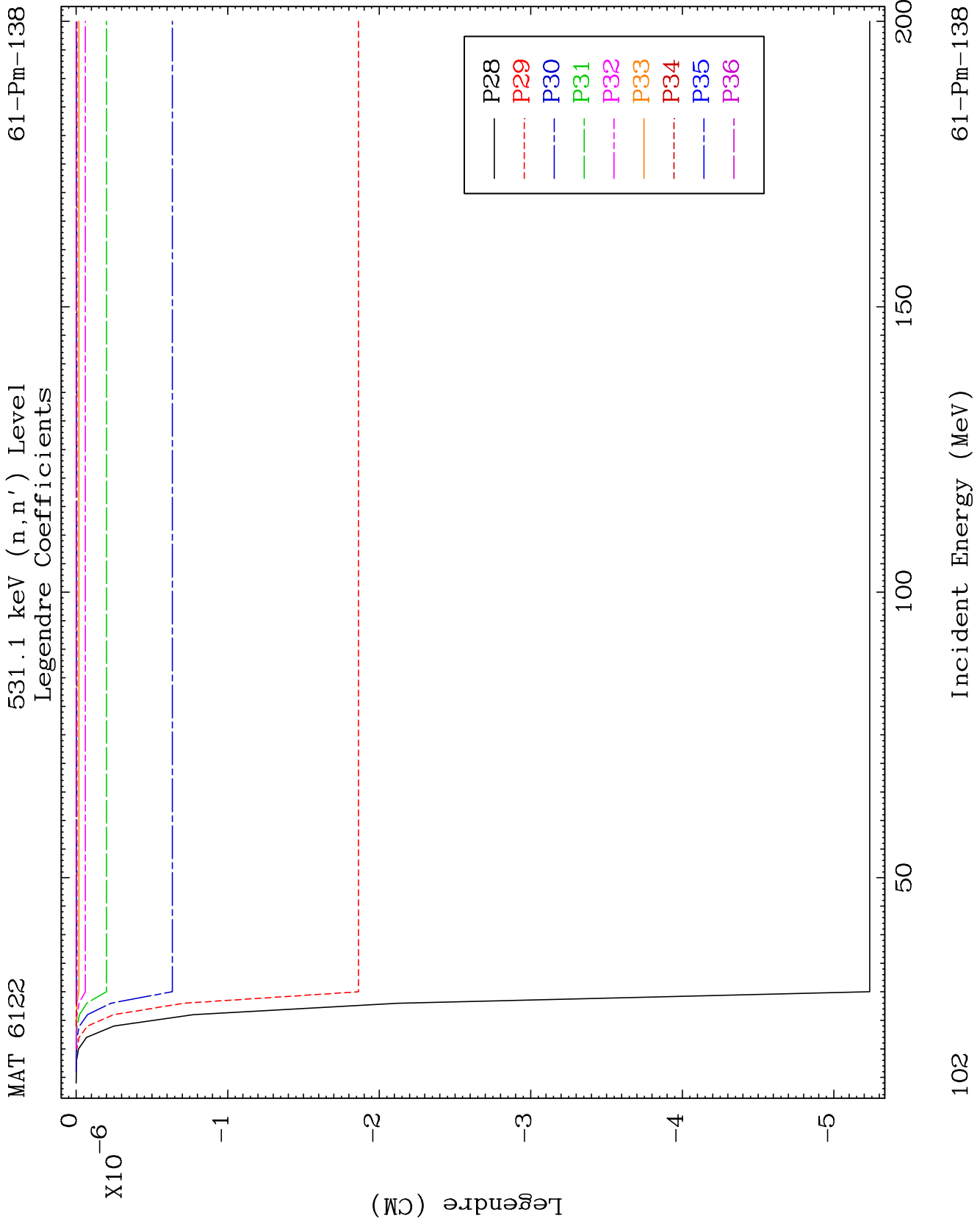
61-Pm-138



101

Incident Energy (MeV)

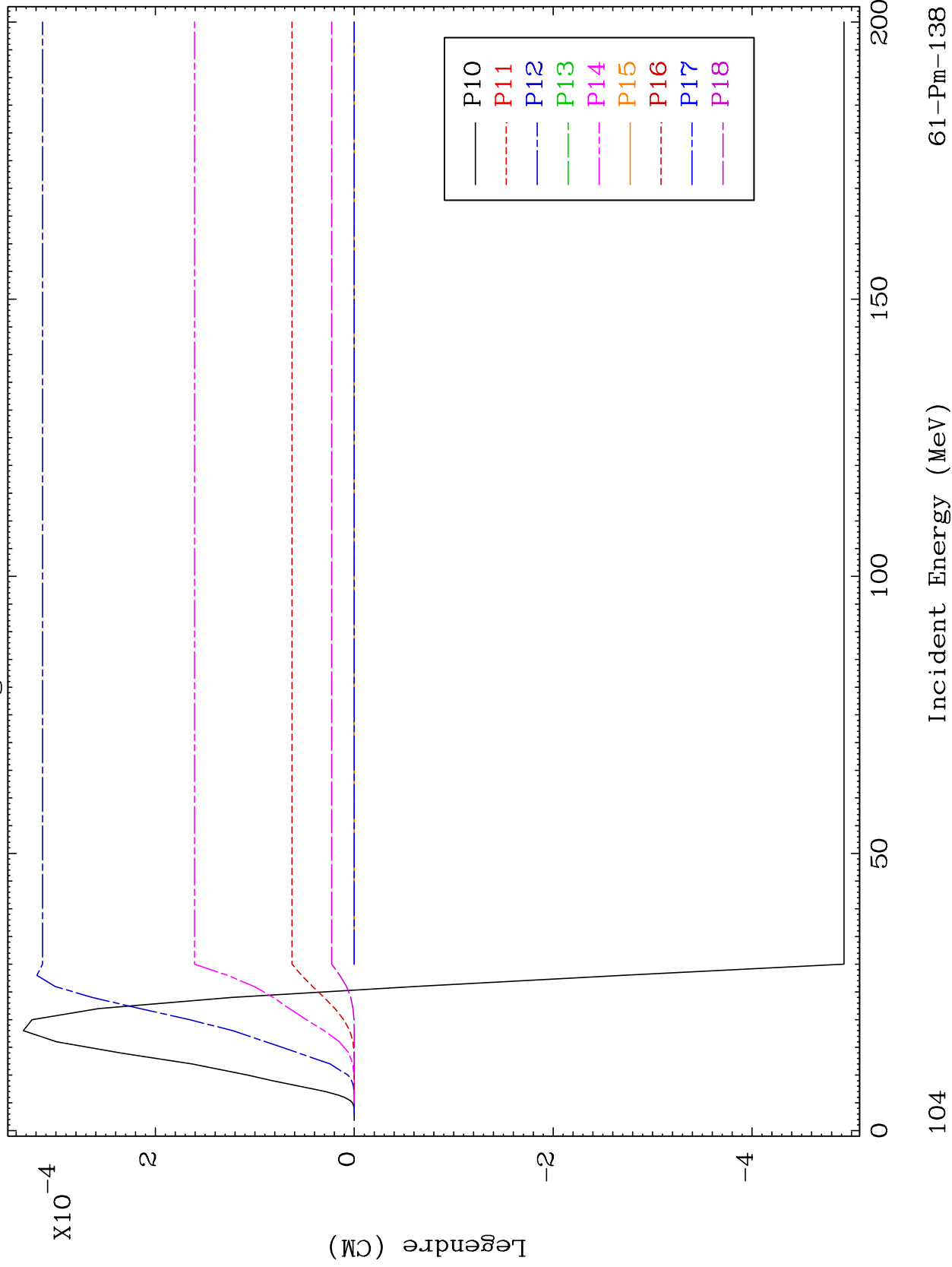
61-Pm-138



MAT 6122

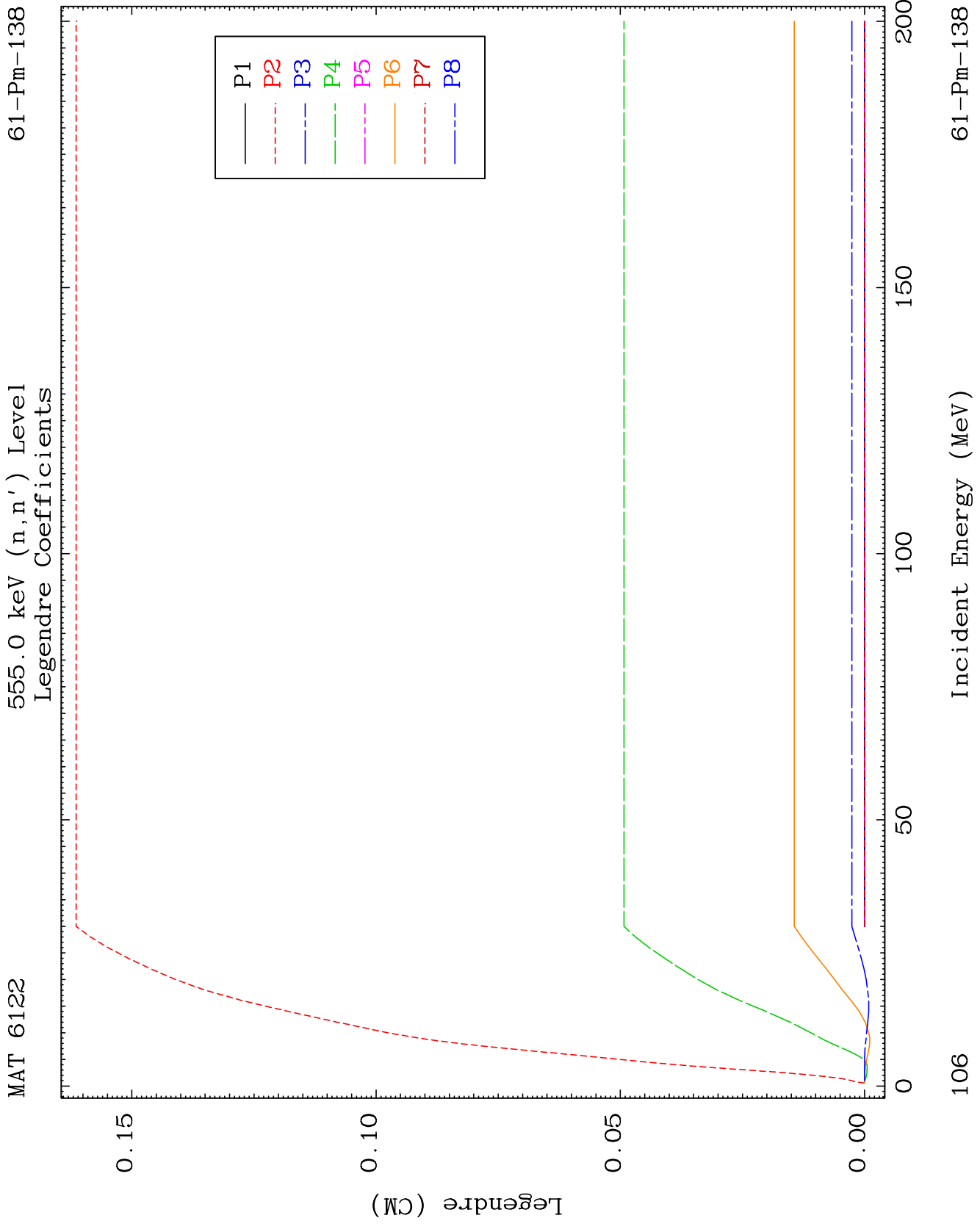
553.9 keV (n,n') Level
Legendre Coefficients

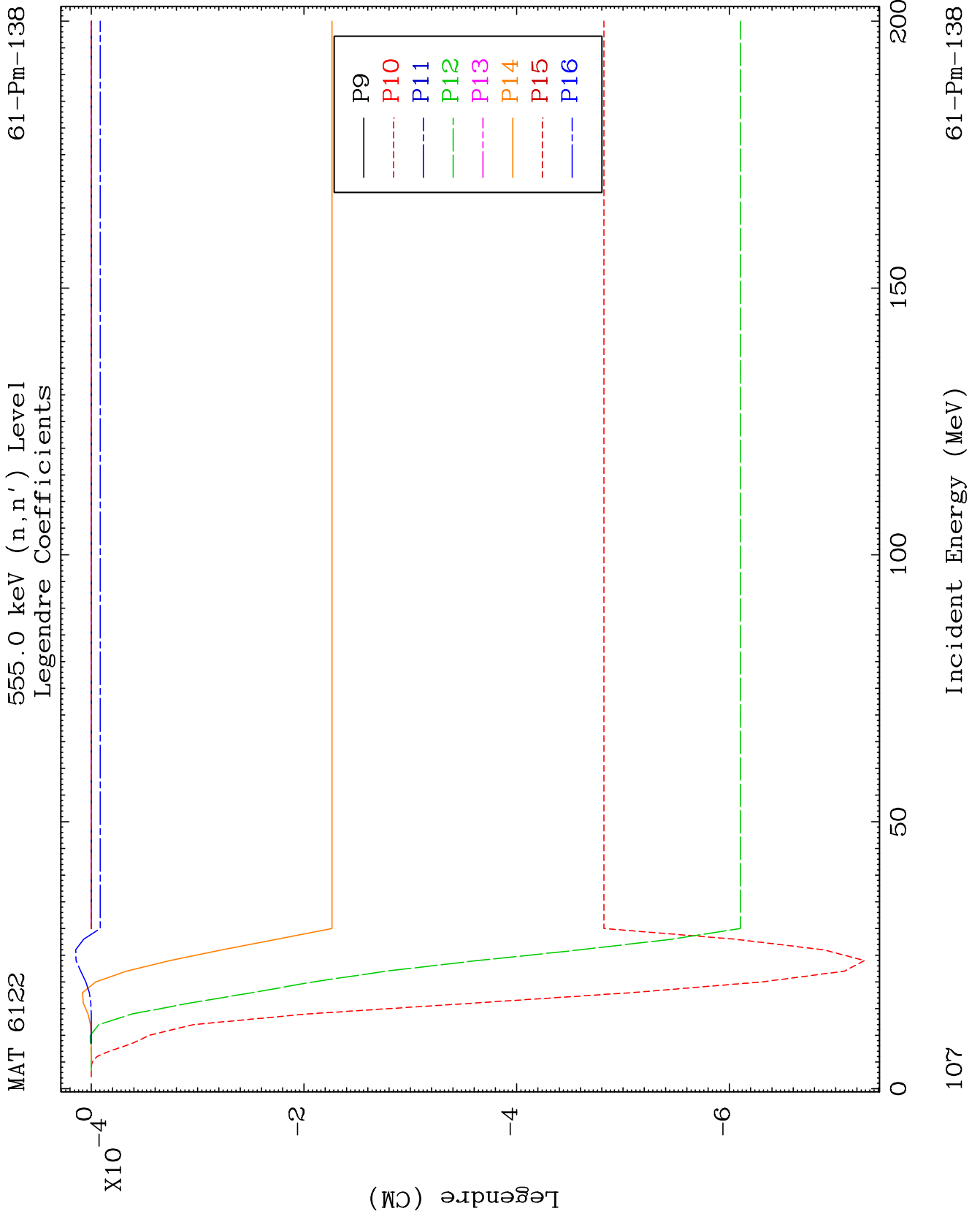
61-Pm-138

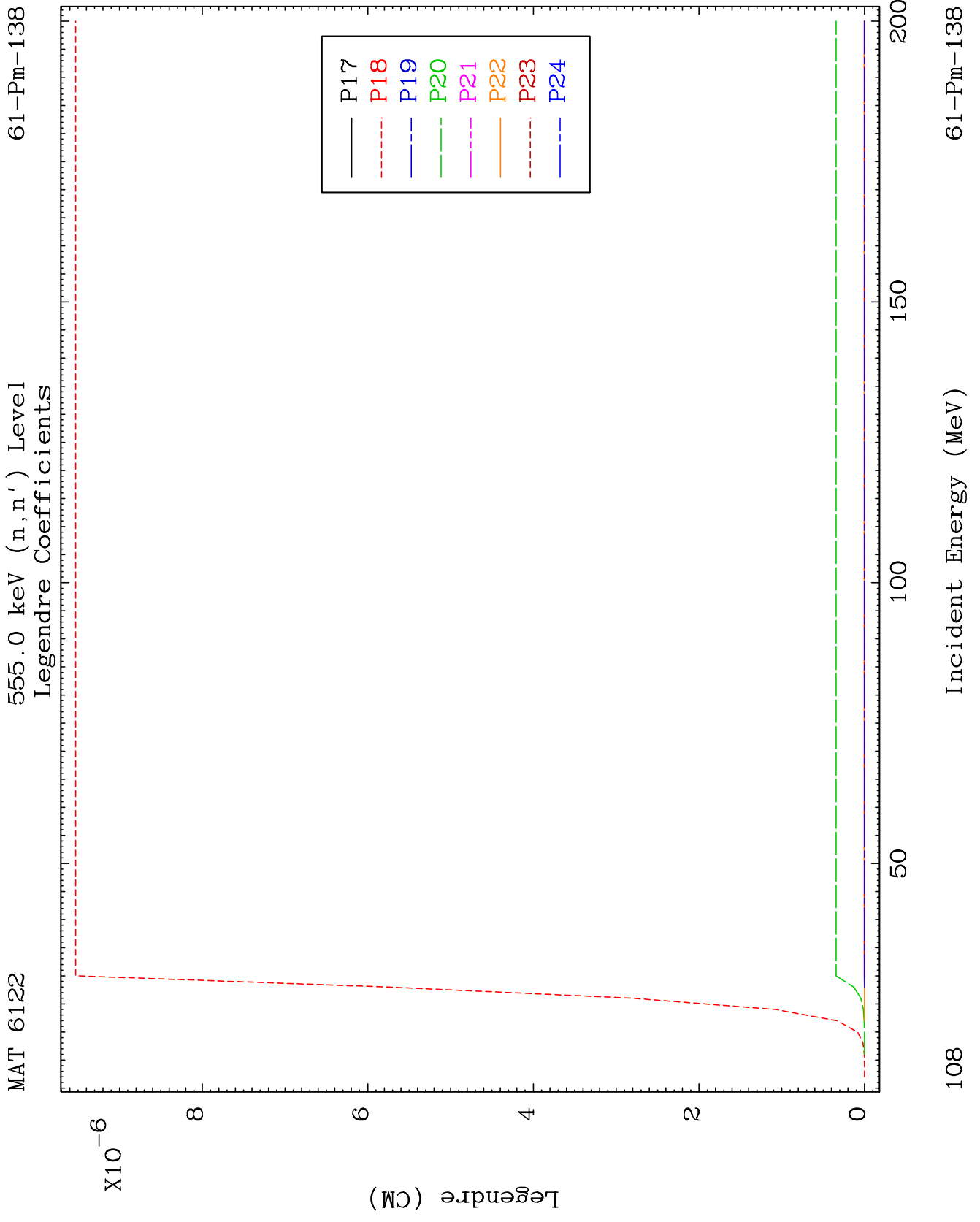


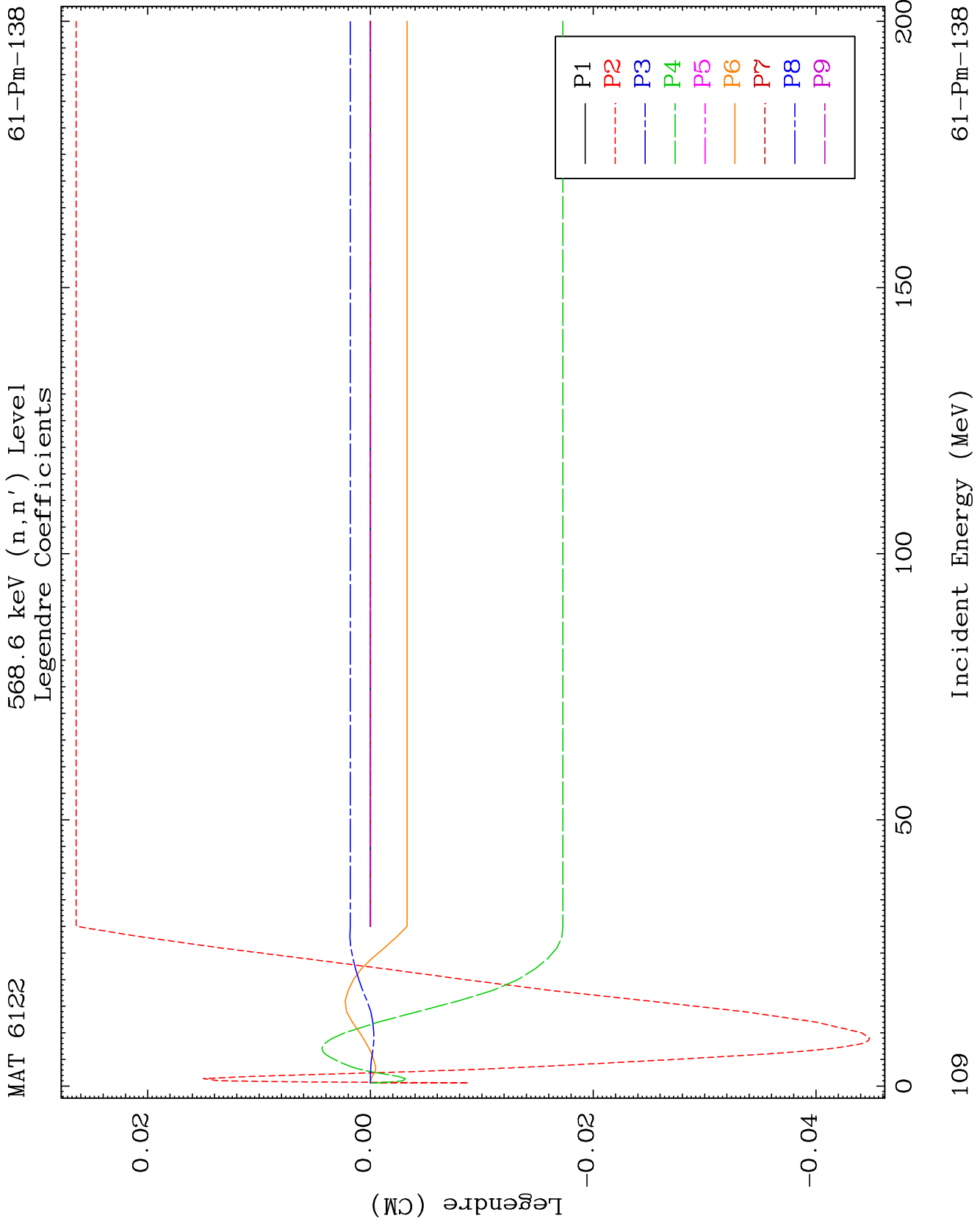
104

61-Pm-138





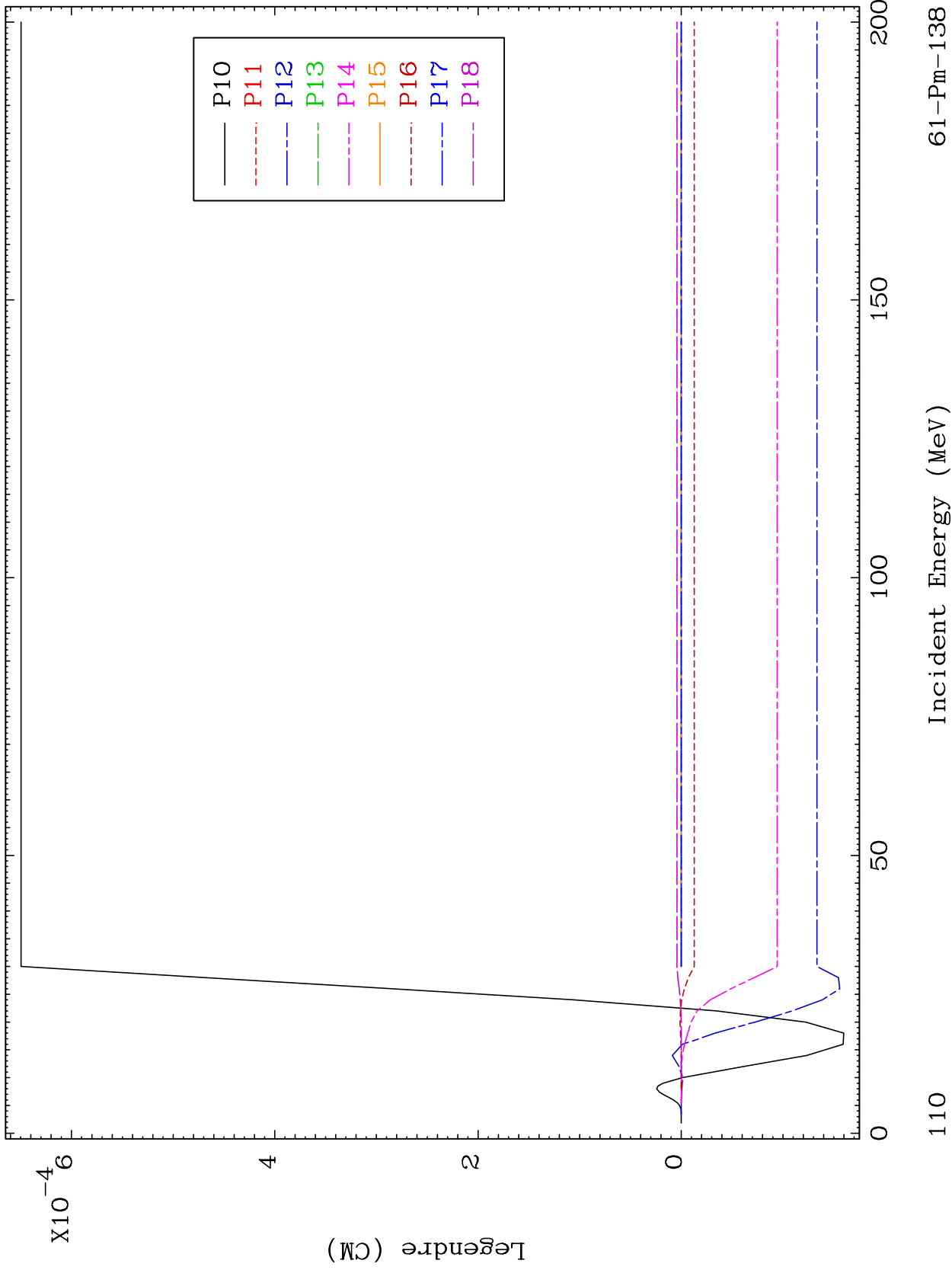




MAT 6122

568.6 keV (n,n') Level
Legendre Coefficients

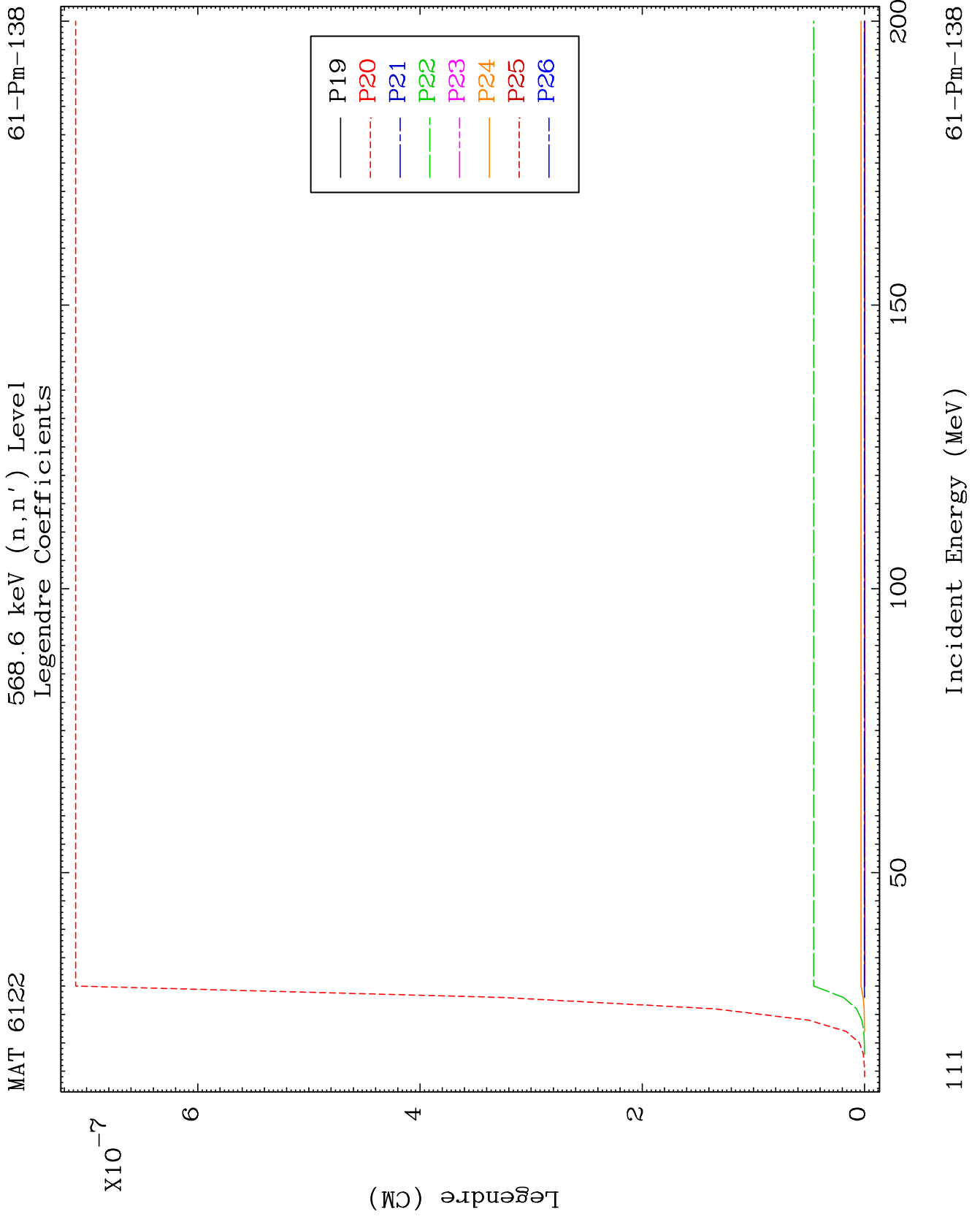
61-Pm-138

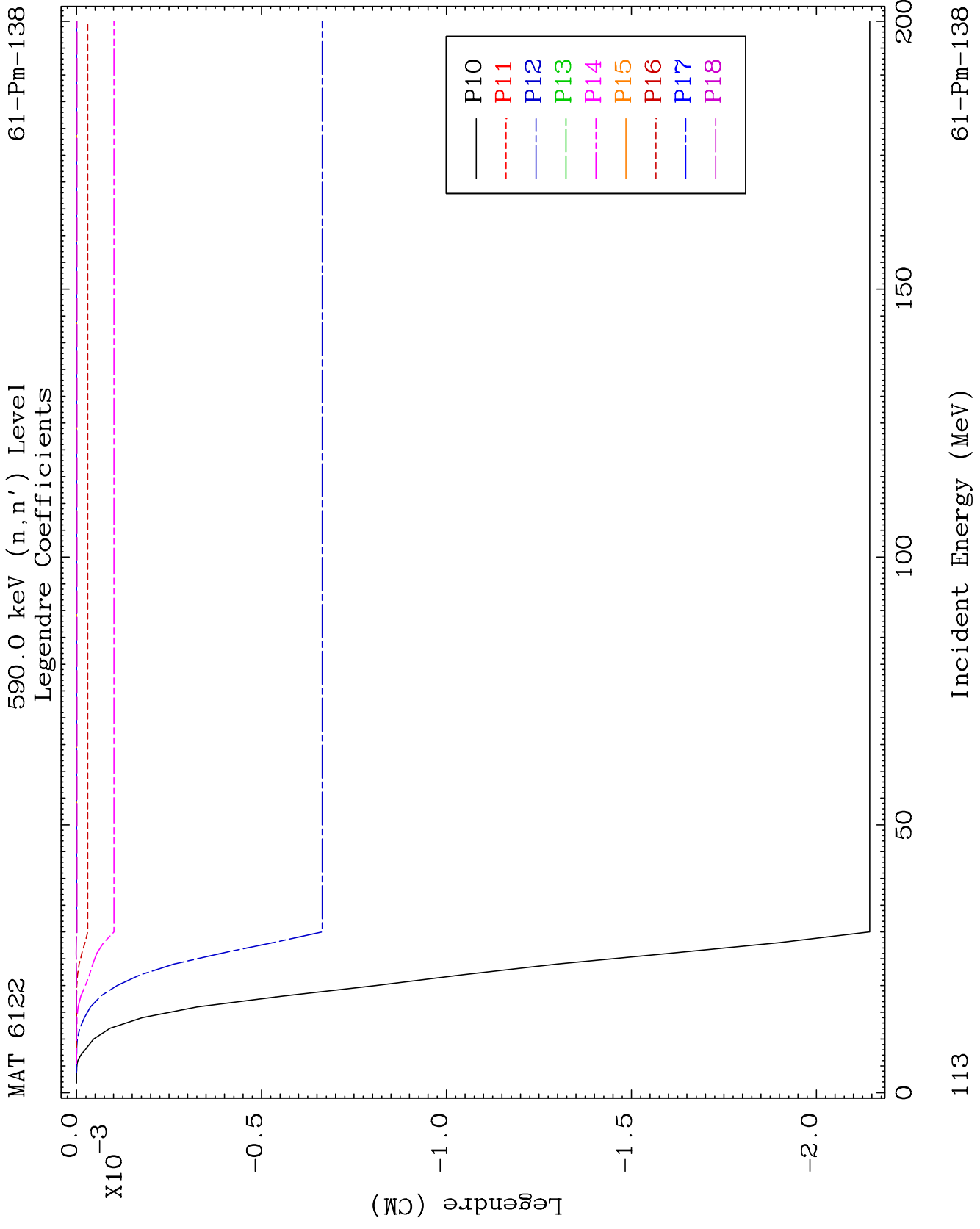


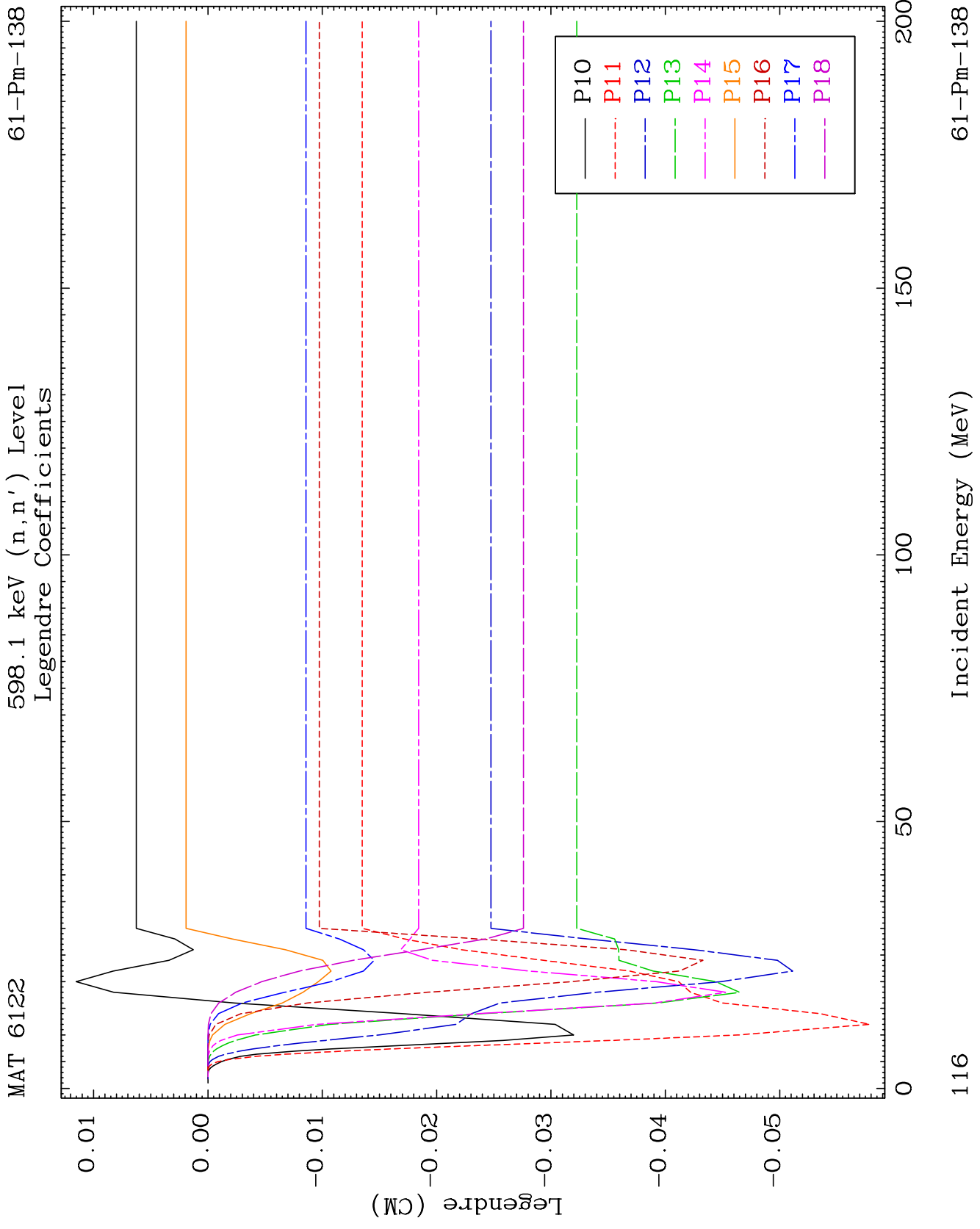
61-Pm-138

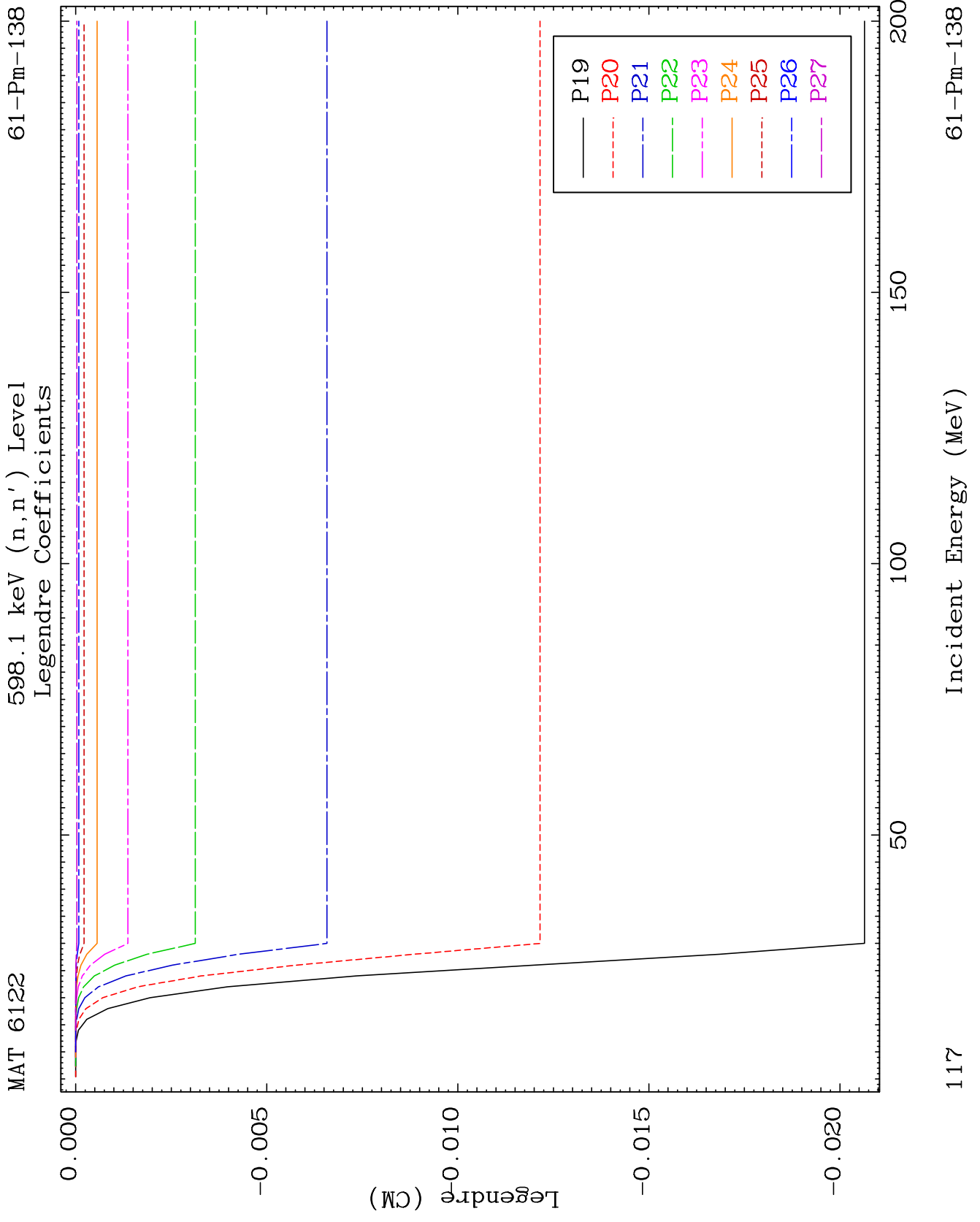
Incident Energy (MeV)

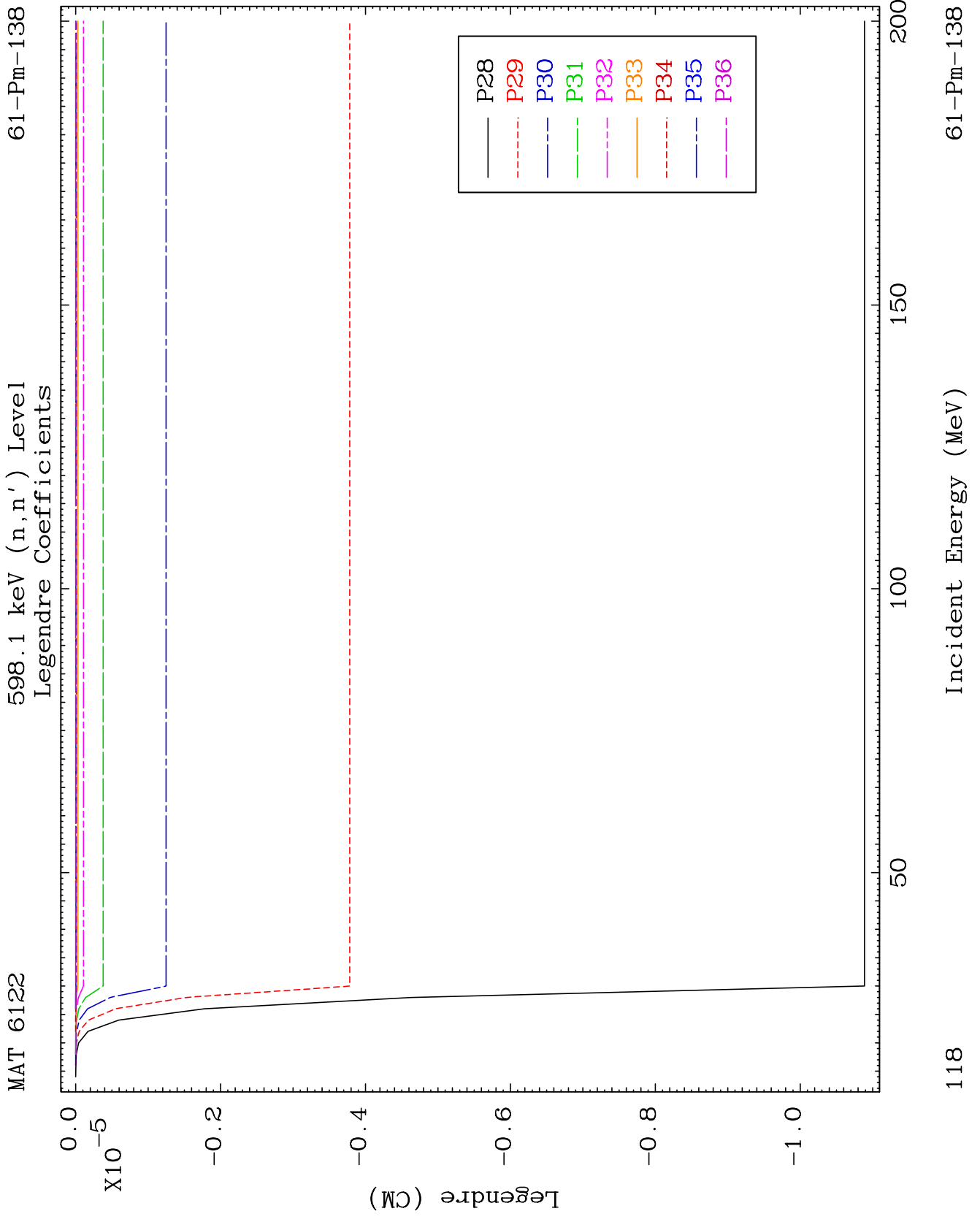
110

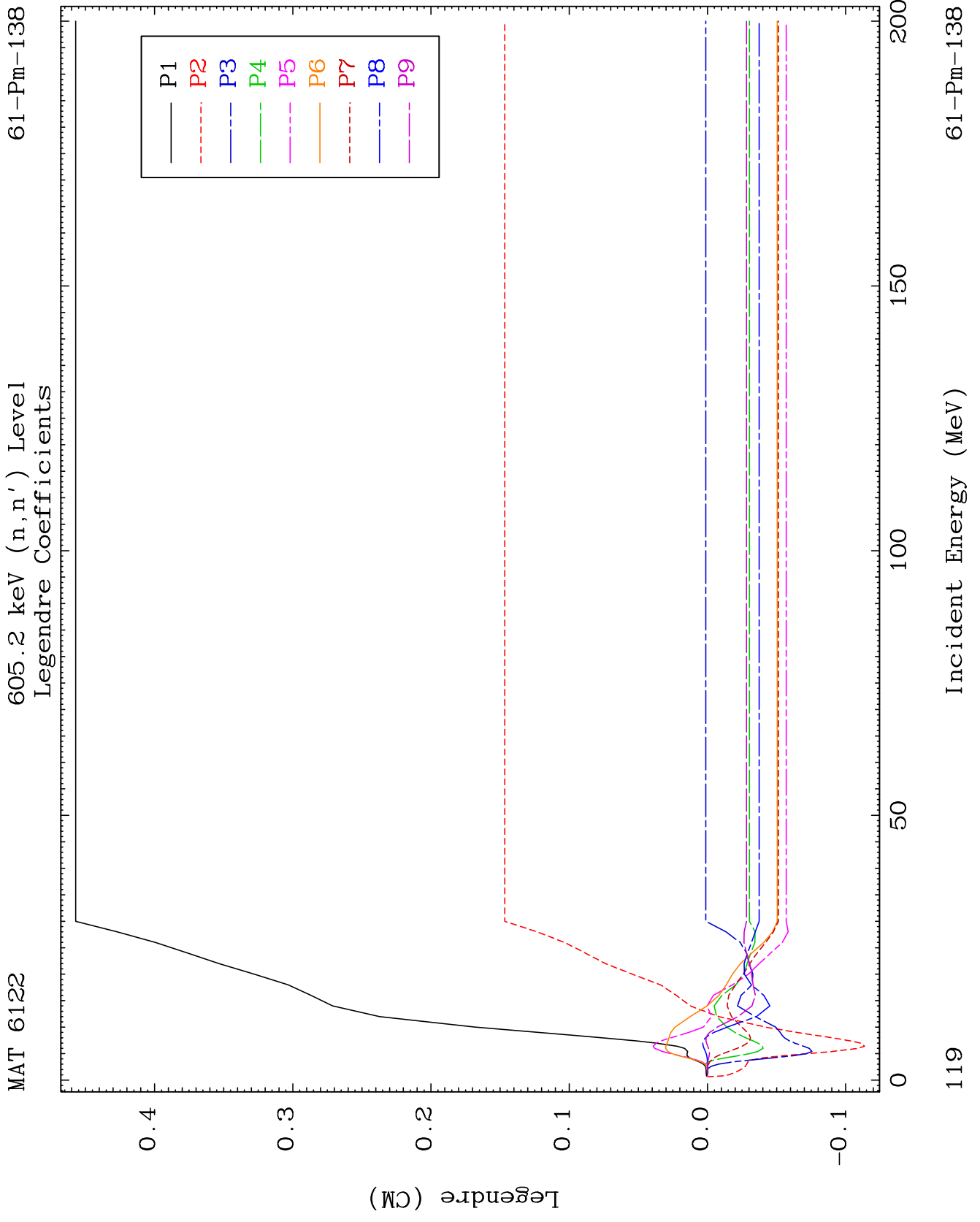


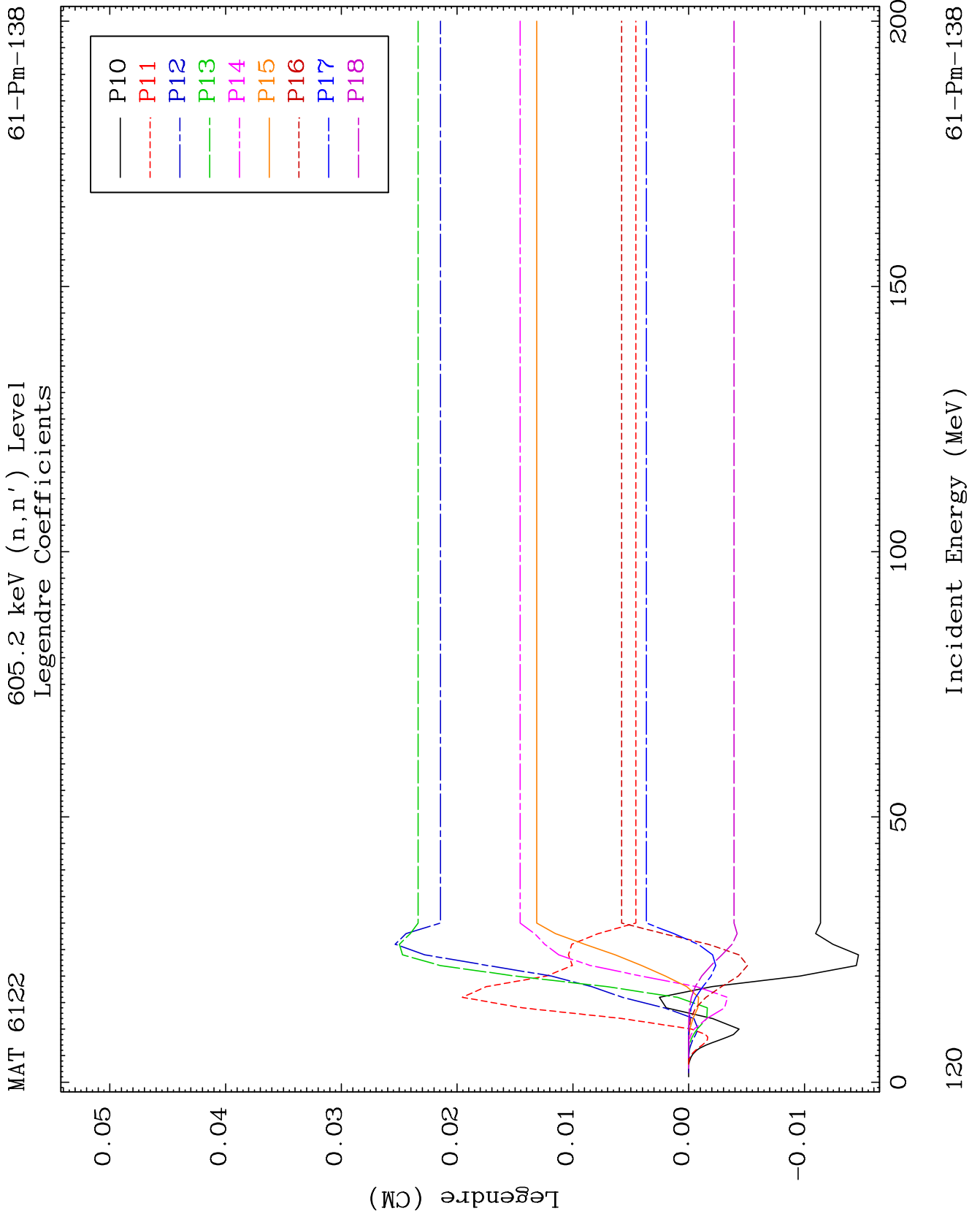








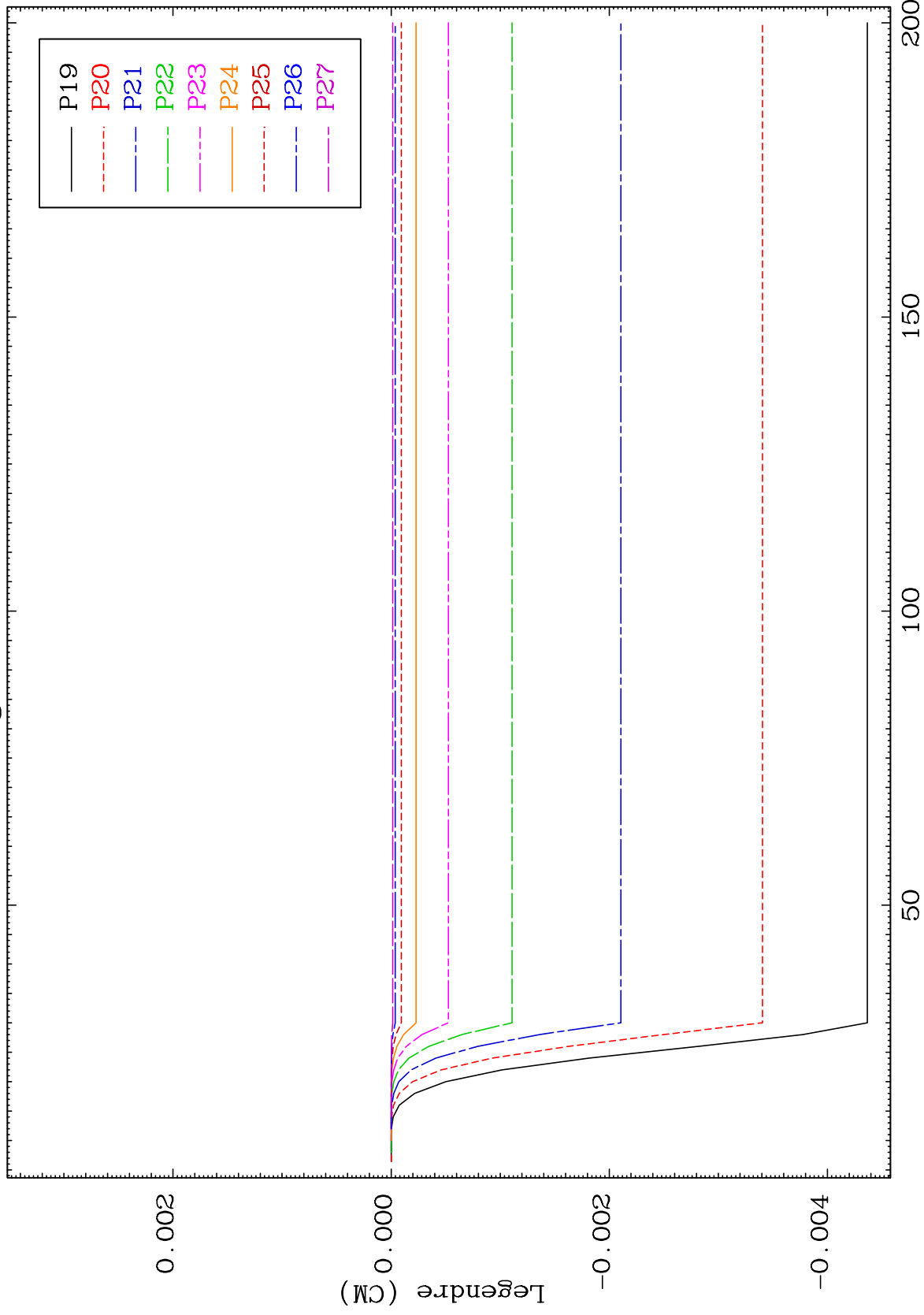




MAT 6122

605.2 keV (n,n') Level
Legendre Coefficients

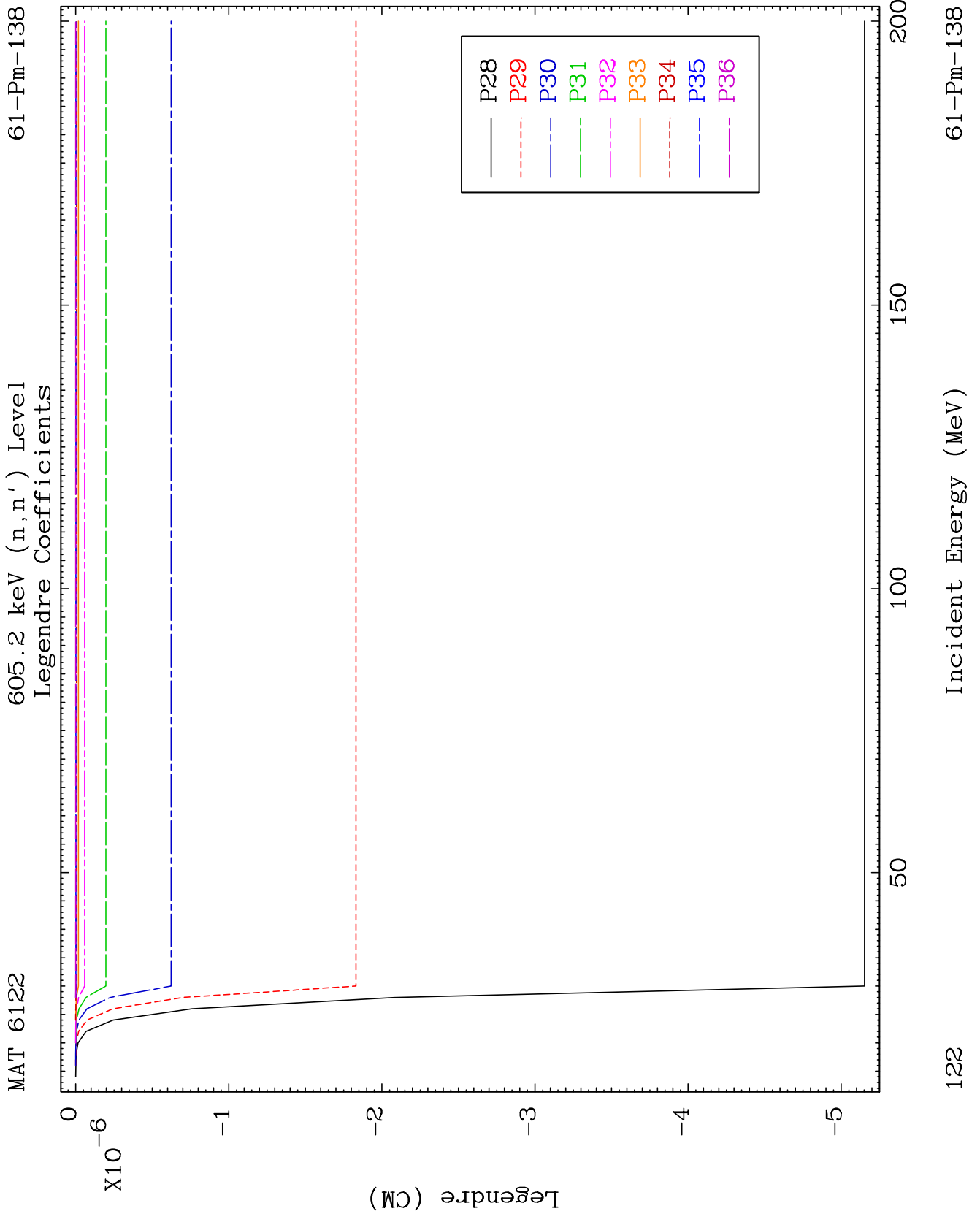
61-Pm-138



121

Incident Energy (MeV)

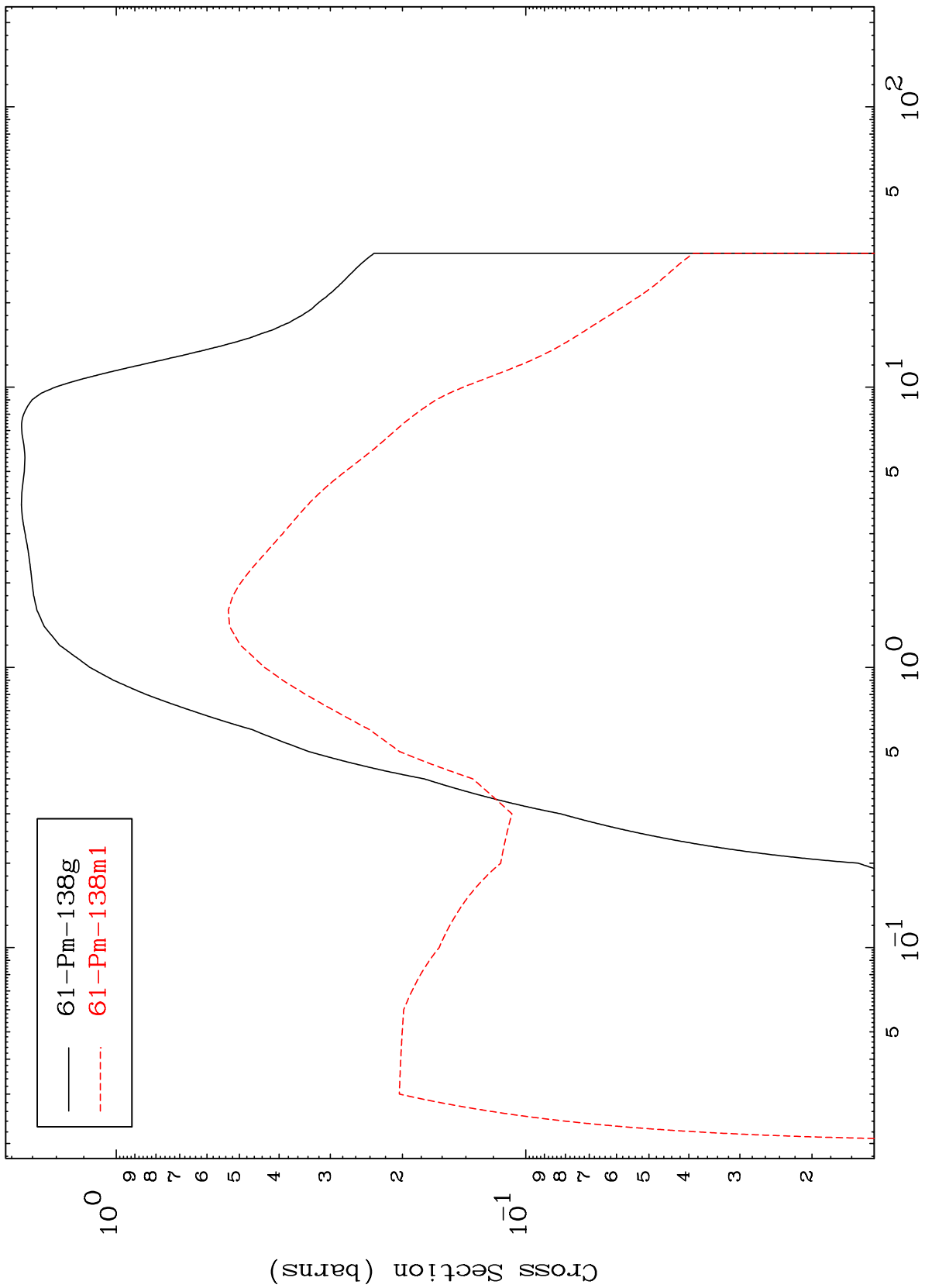
61-Pm-138



MAT 6122

61-Pm-138

Radionuclide Production Cross Section



61-Pm-138g
61-Pm-138m1

61-Pm-138

Incident Energy (MeV)

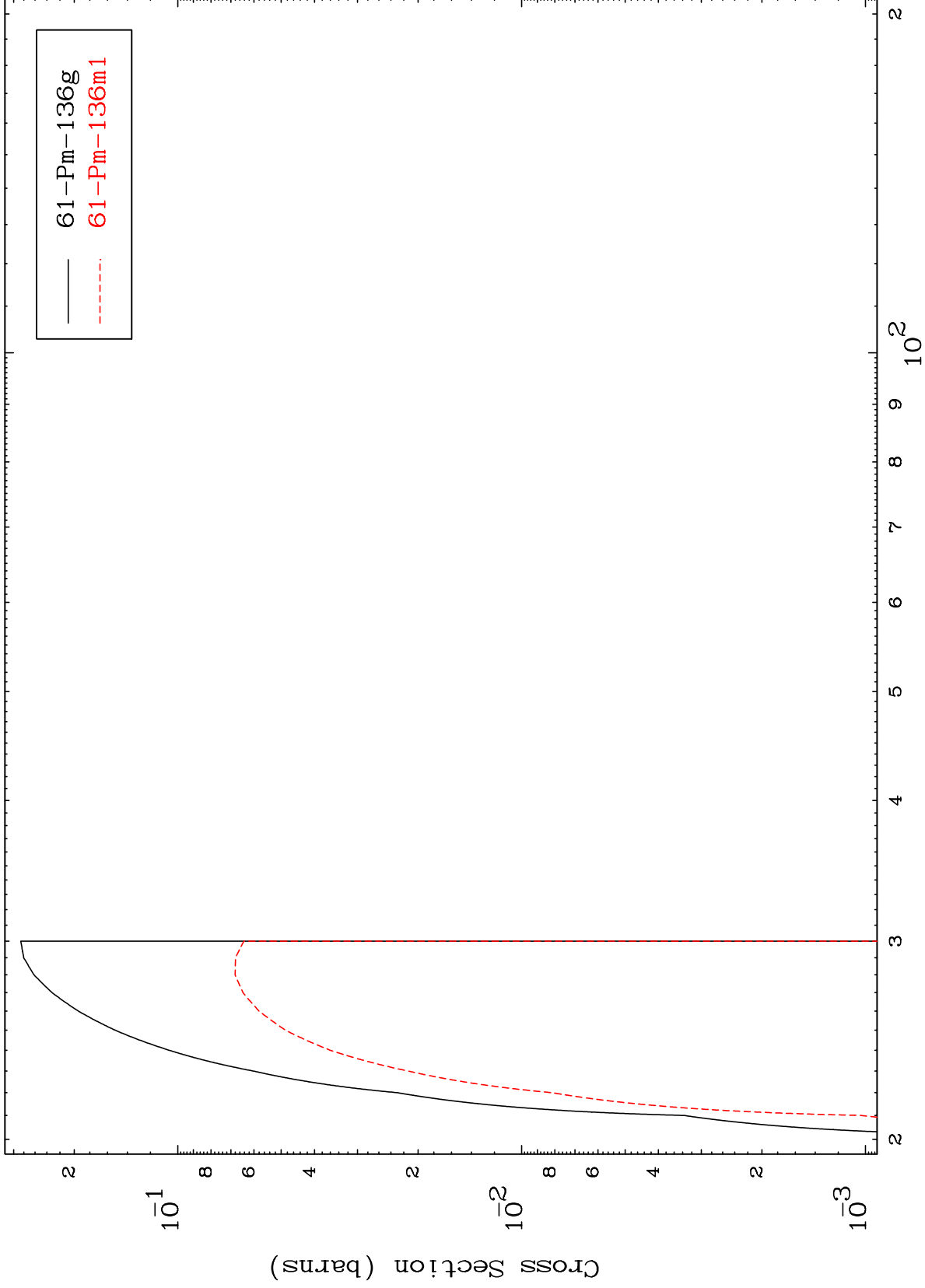
123

MAT 6122

(n,3n)

61-Pm-138

Radionuclide Production Cross Section



124

Incident Energy (MeV)

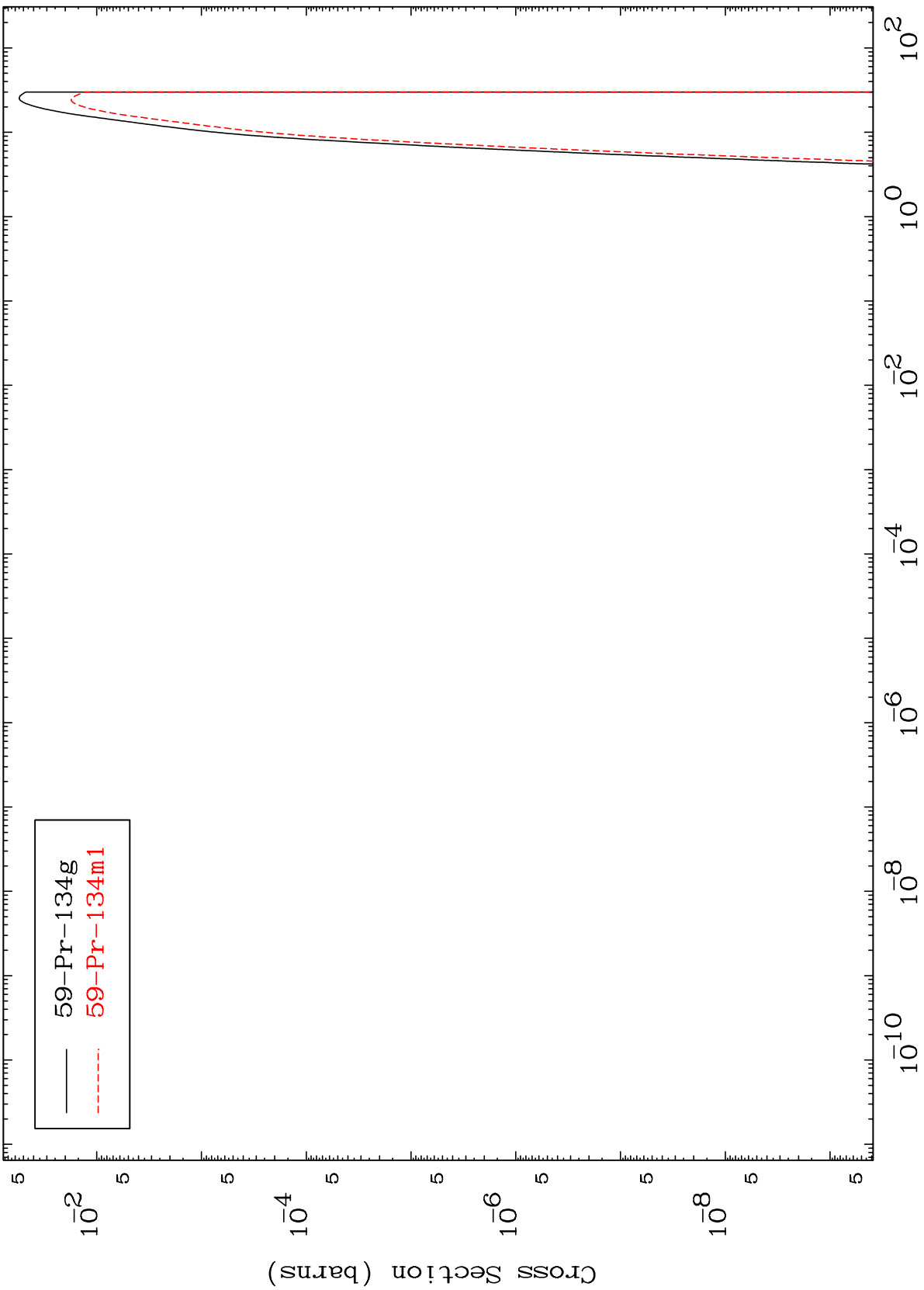
61-Pm-138

MAT 6122

$(n, n') \alpha$

61-Pm-138

Radionuclide Production Cross Section



125

Incident Energy (MeV)

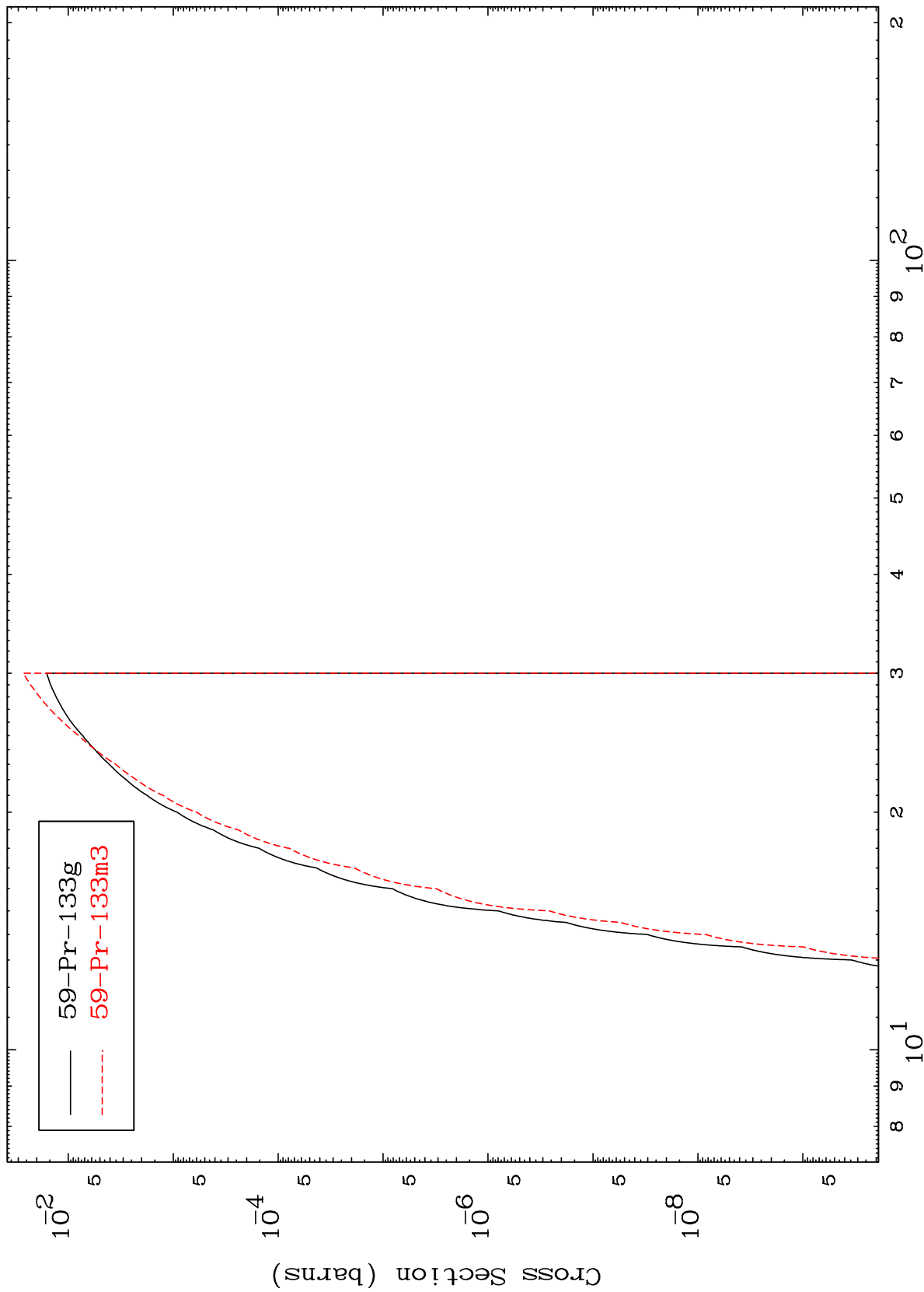
61-Pm-138

MAT 6122

(n,2n) α

61-Pm-138

Radionuclide Production Cross Section



126

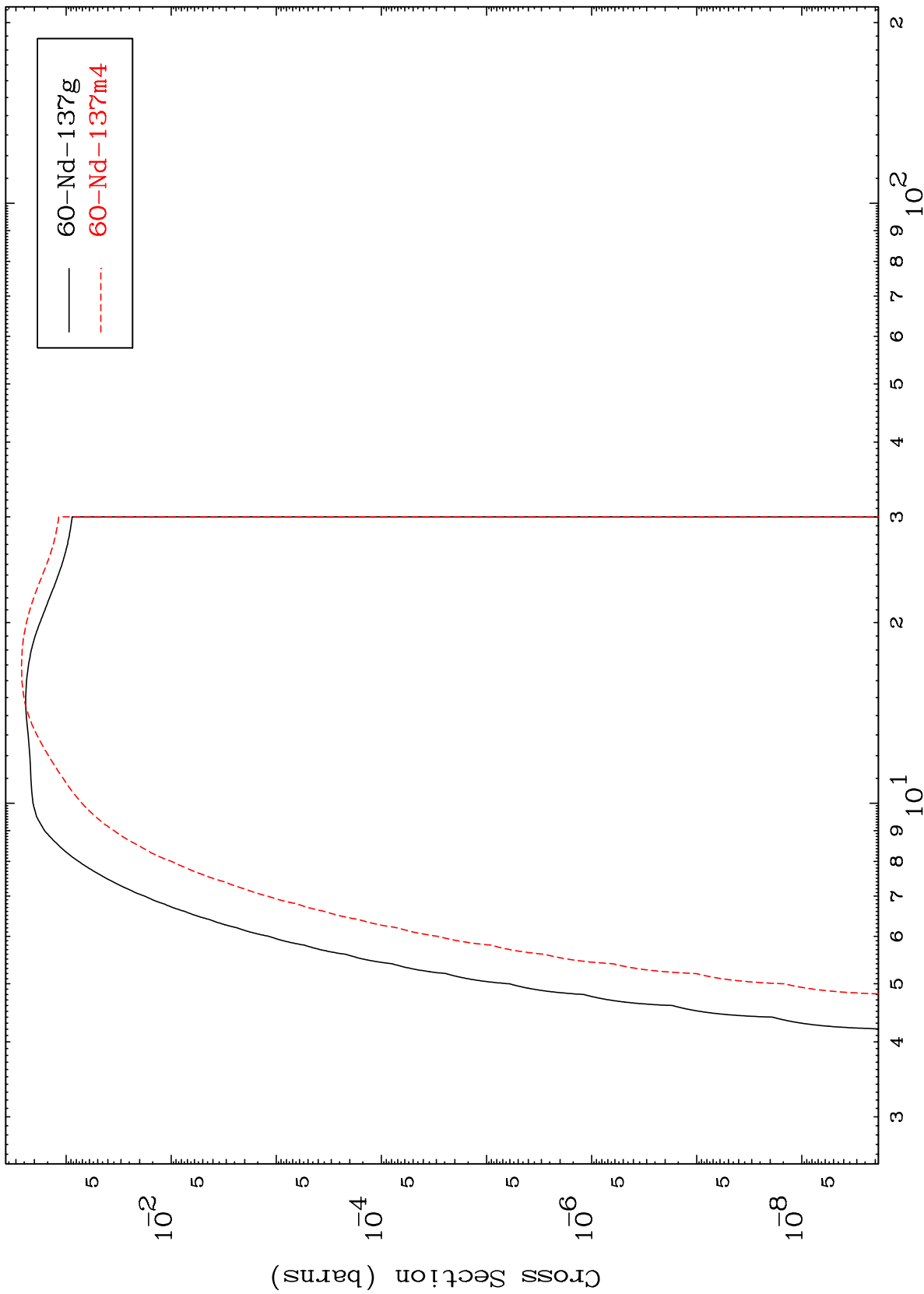
Incident Energy (MeV)

61-Pm-138

MAT 6122

61-Pm-138

(n, n') p
Radionuclide Production Cross Section



127

Incident Energy (MeV)

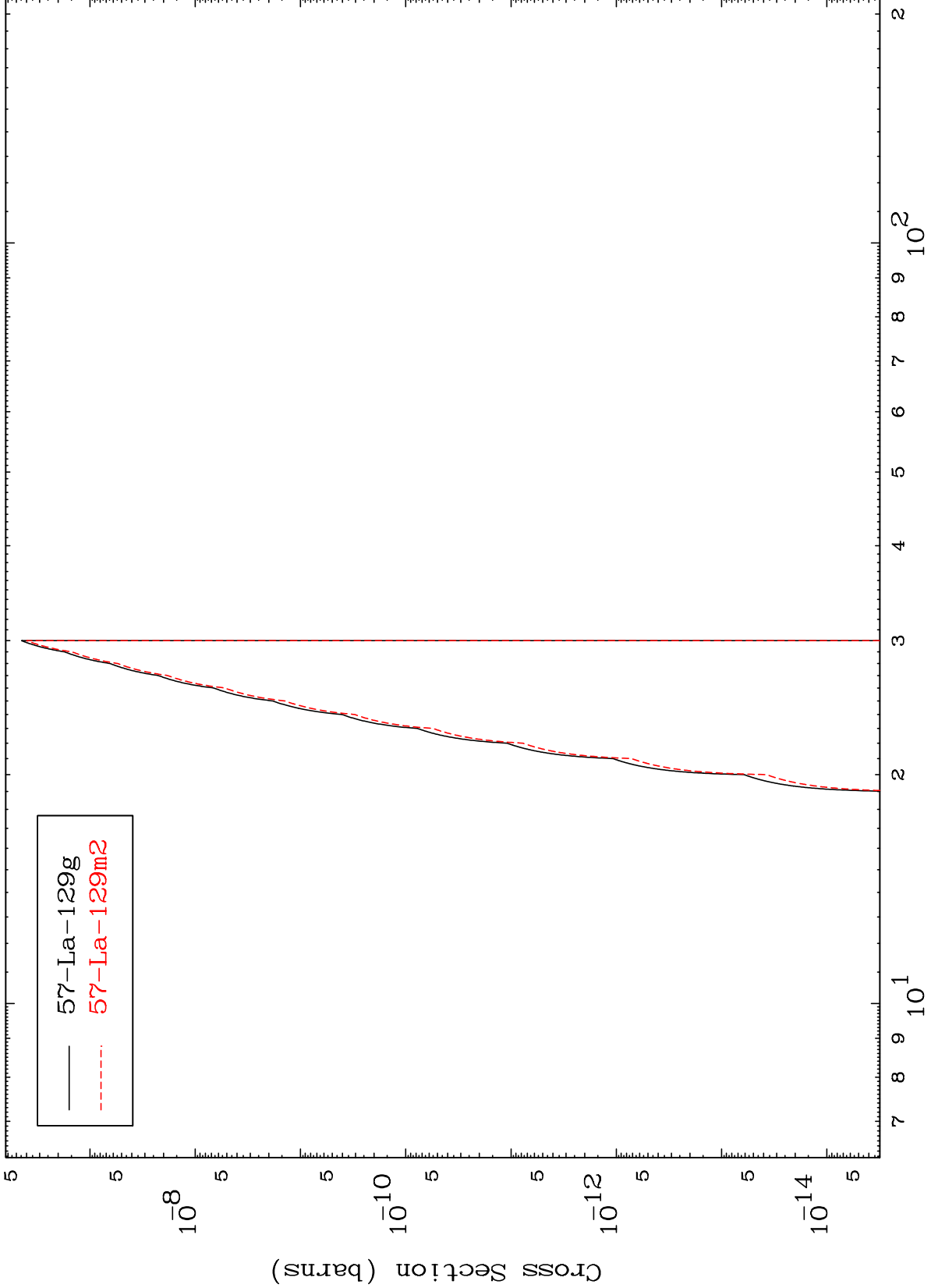
61-Pm-138

MAT 6122

$(n,2n) 2\alpha$

61-Pm-138

Radionuclide Production Cross Section



128

Incident Energy (MeV)

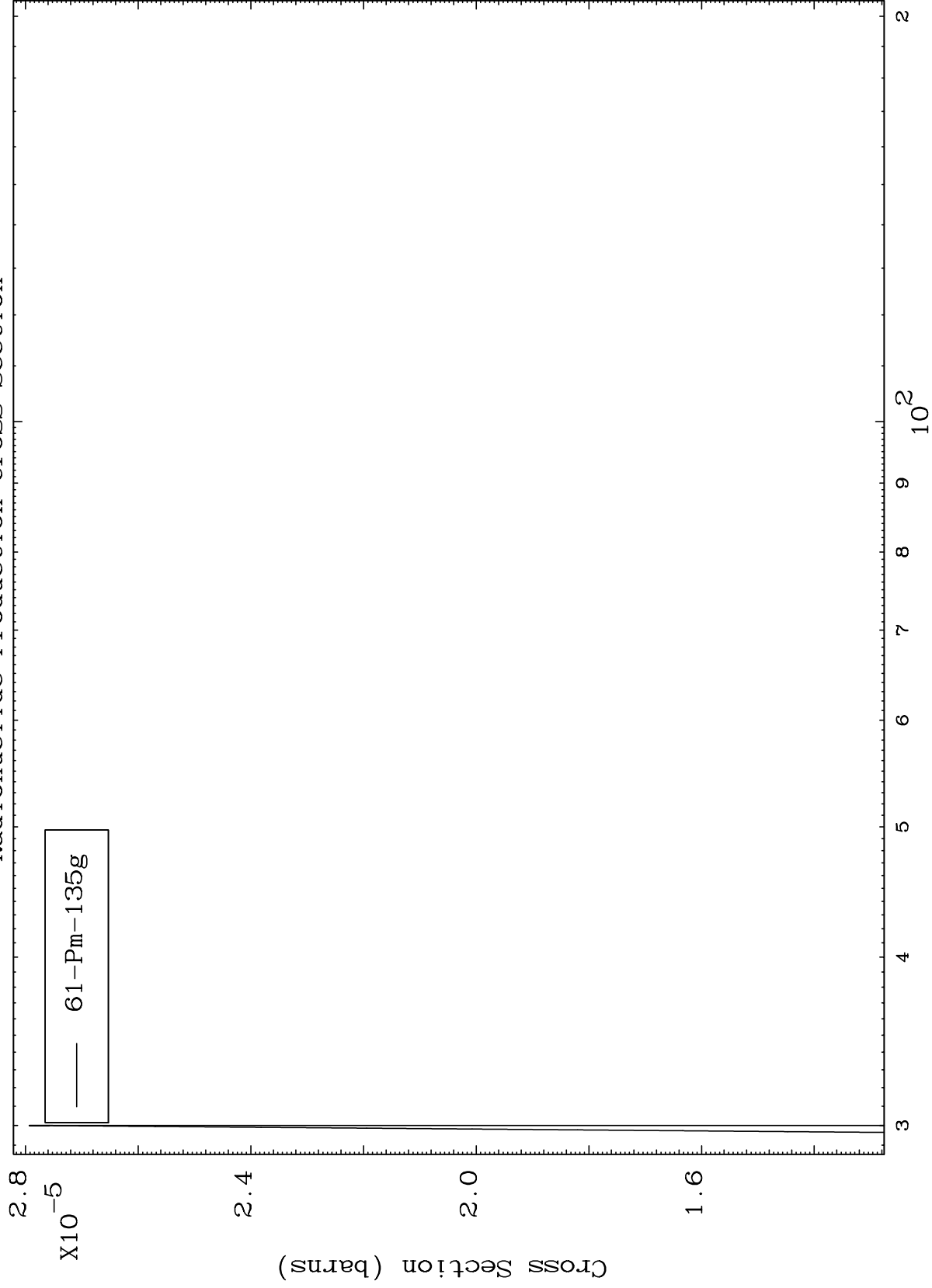
61-Pm-138

MAT 6122

(n,4n)

61-Pm-138

Radionuclide Production Cross Section



129

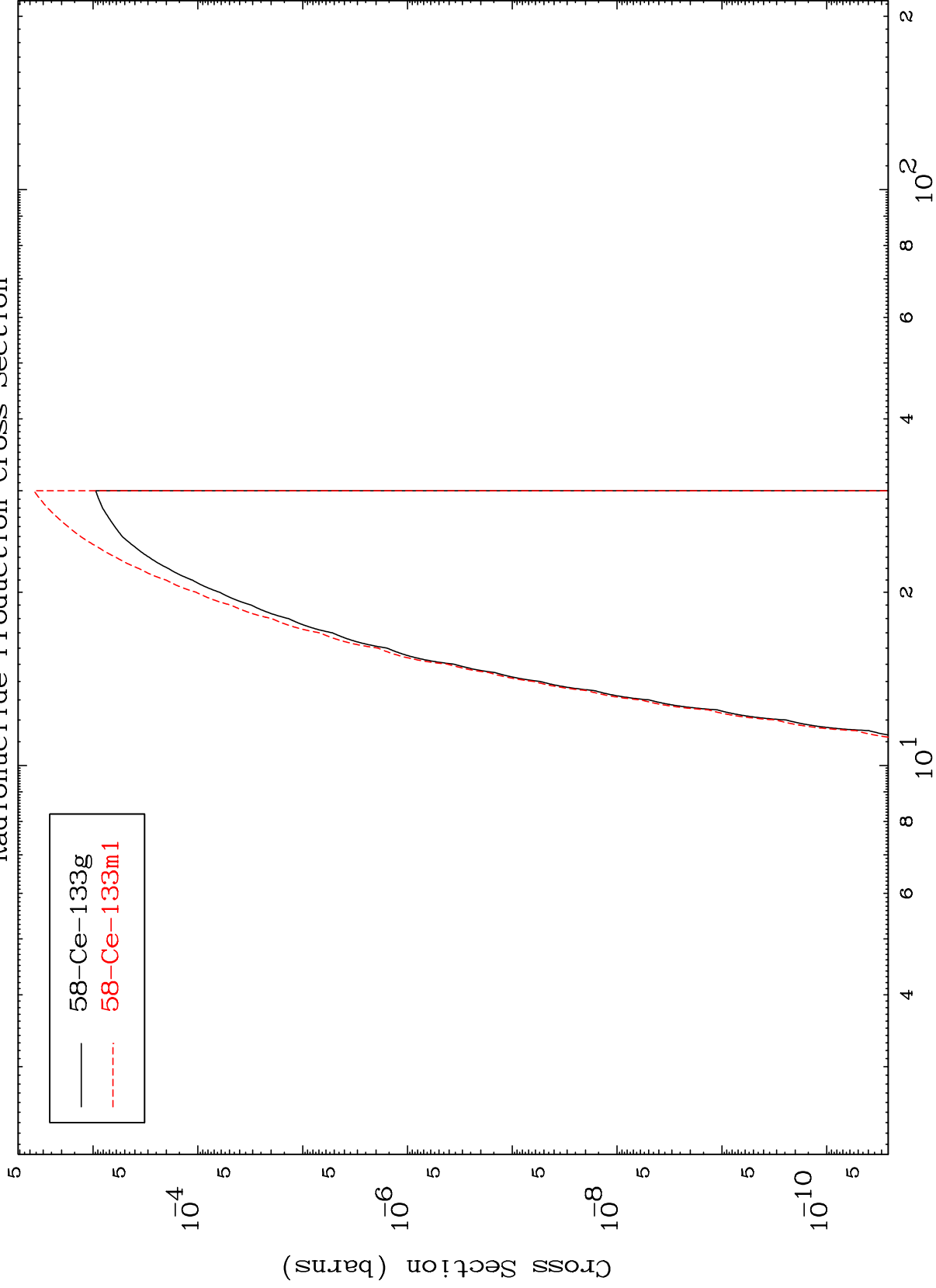
61-Pm-138

MAT 6122

(n,n') p α

61-Pm-138

Radionuclide Production Cross Section



130

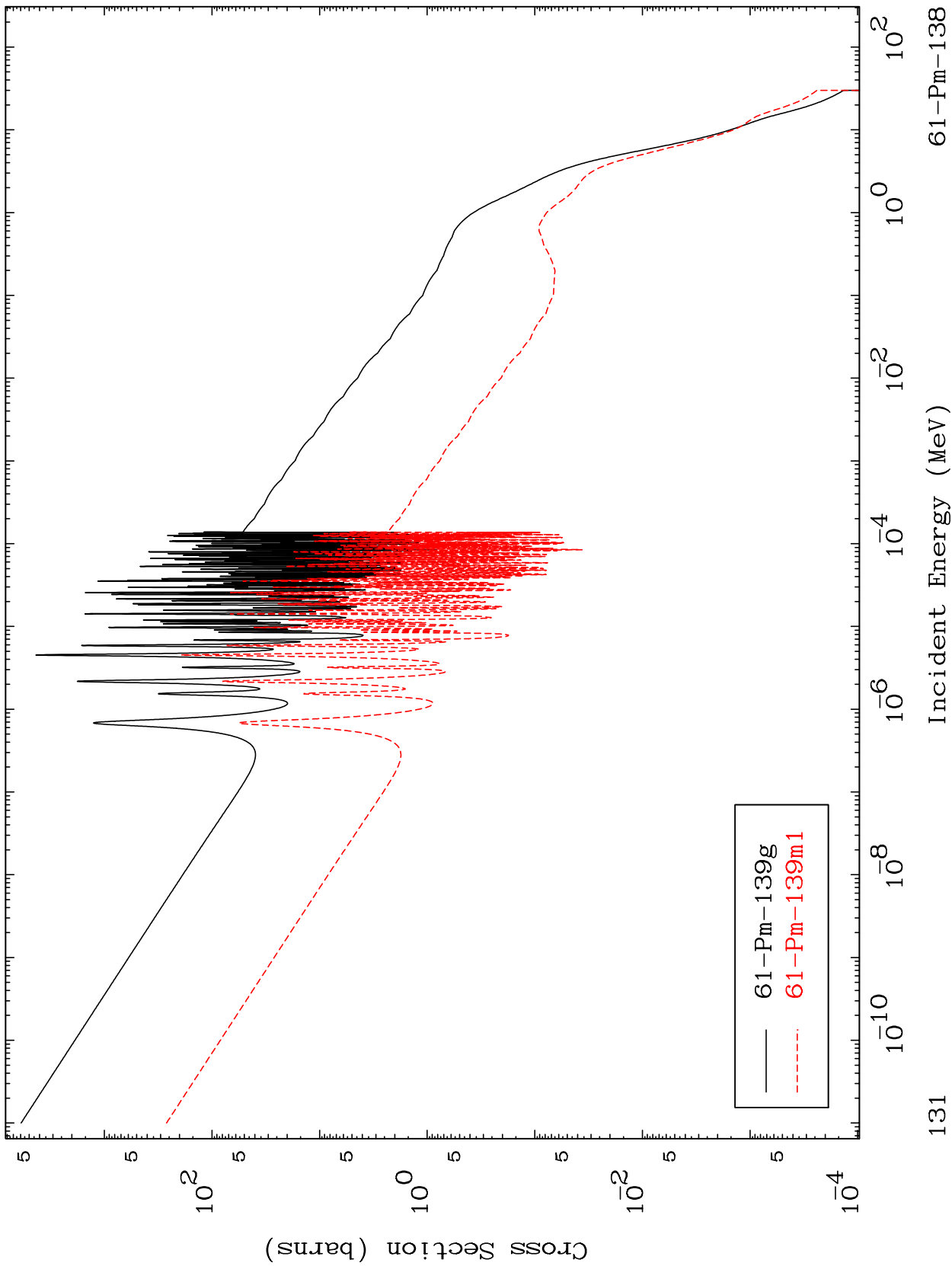
Incident Energy (MeV)

61-Pm-138

MAT 6122

61-Pm-138

(n, γ)
Radionuclide Production Cross Section



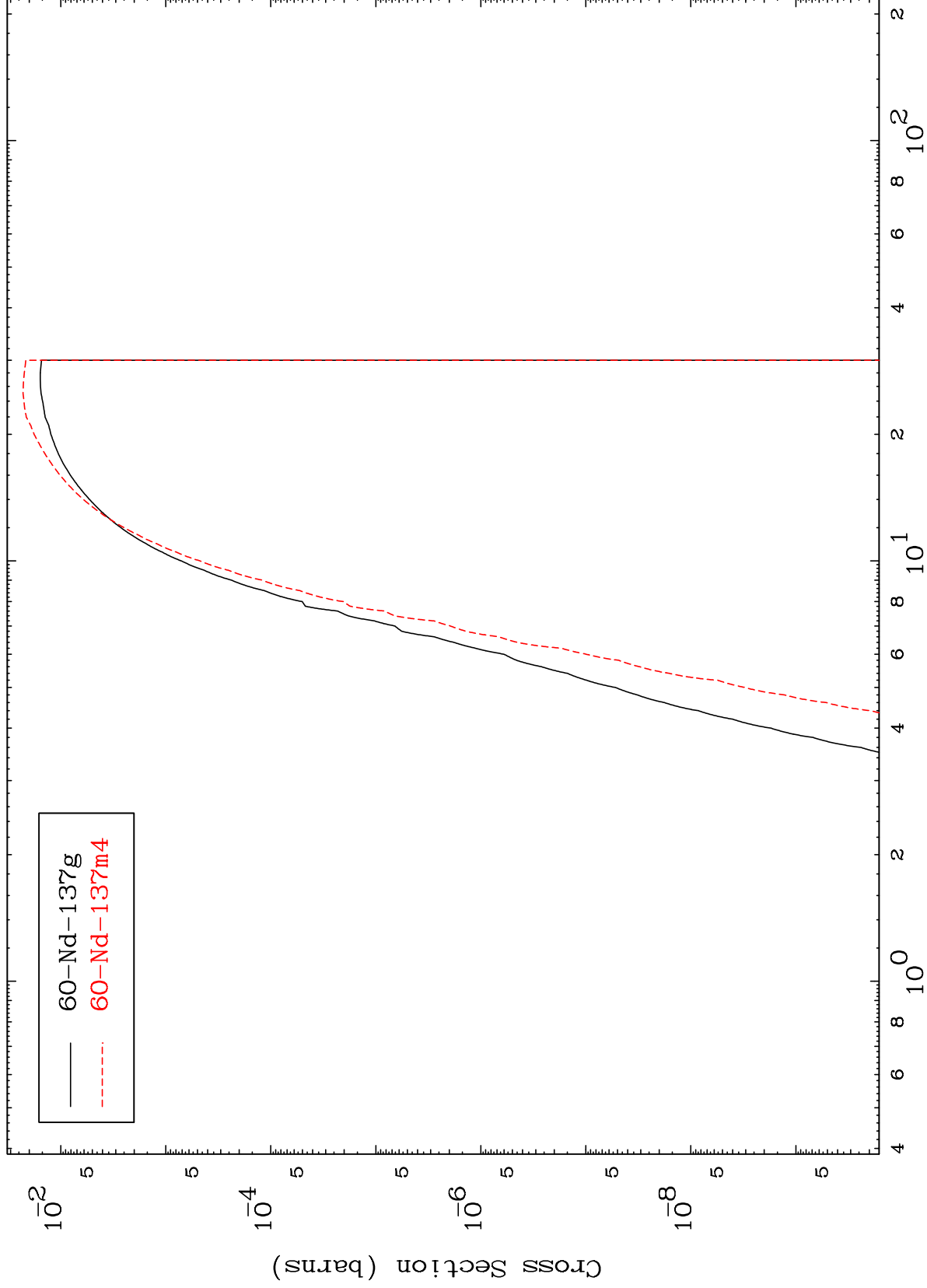
131

MAT 6122

(n,d)

61-Pm-138

Radionuclide Production Cross Section



132

Incident Energy (MeV)

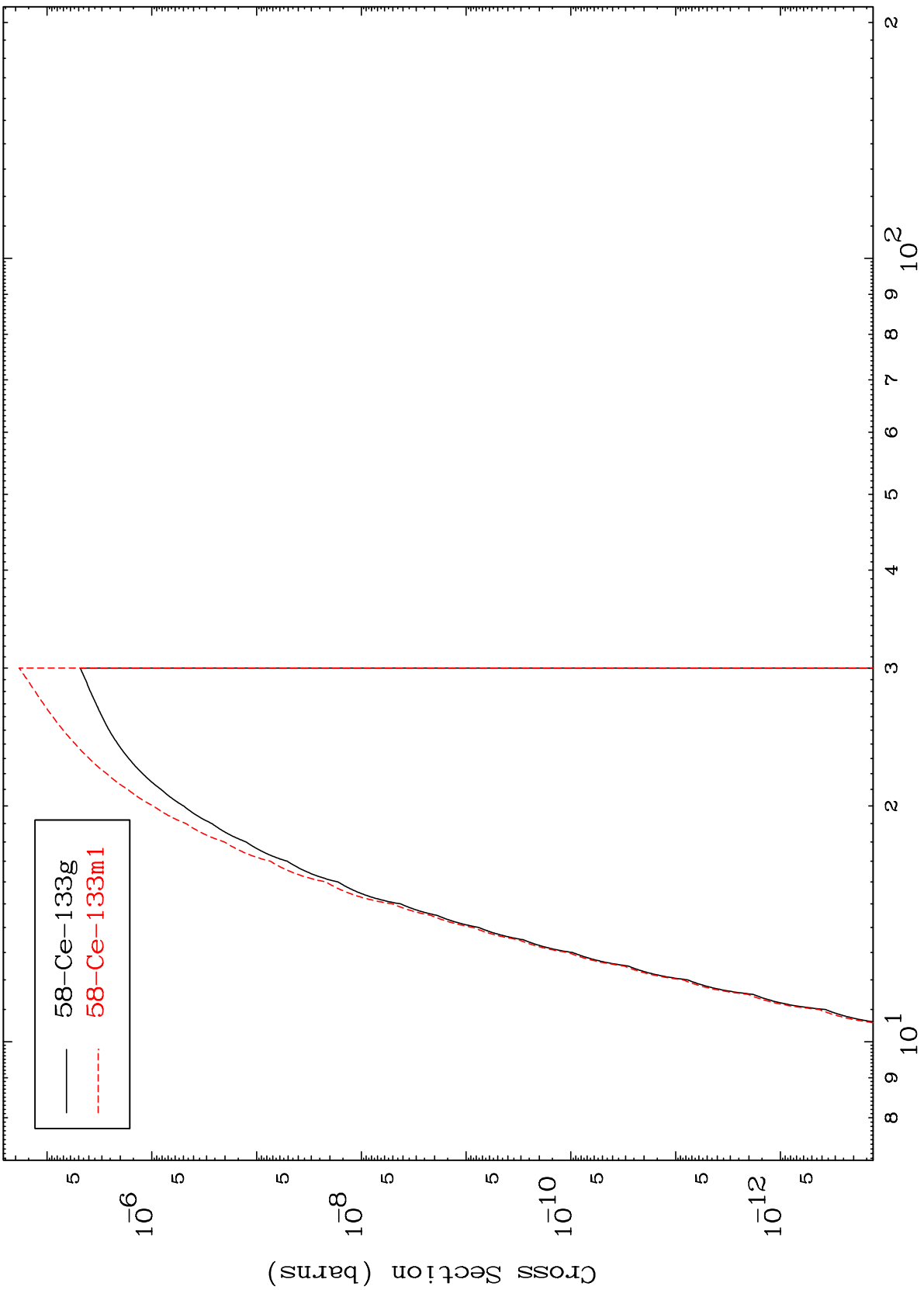
61-Pm-138

MAT 6122

(n,d) α

61-Pm-138

Radionuclide Production Cross Section



133

Incident Energy (MeV)

61-Pm-138