

Program EVALPLOT
(Version 2017-1)

by

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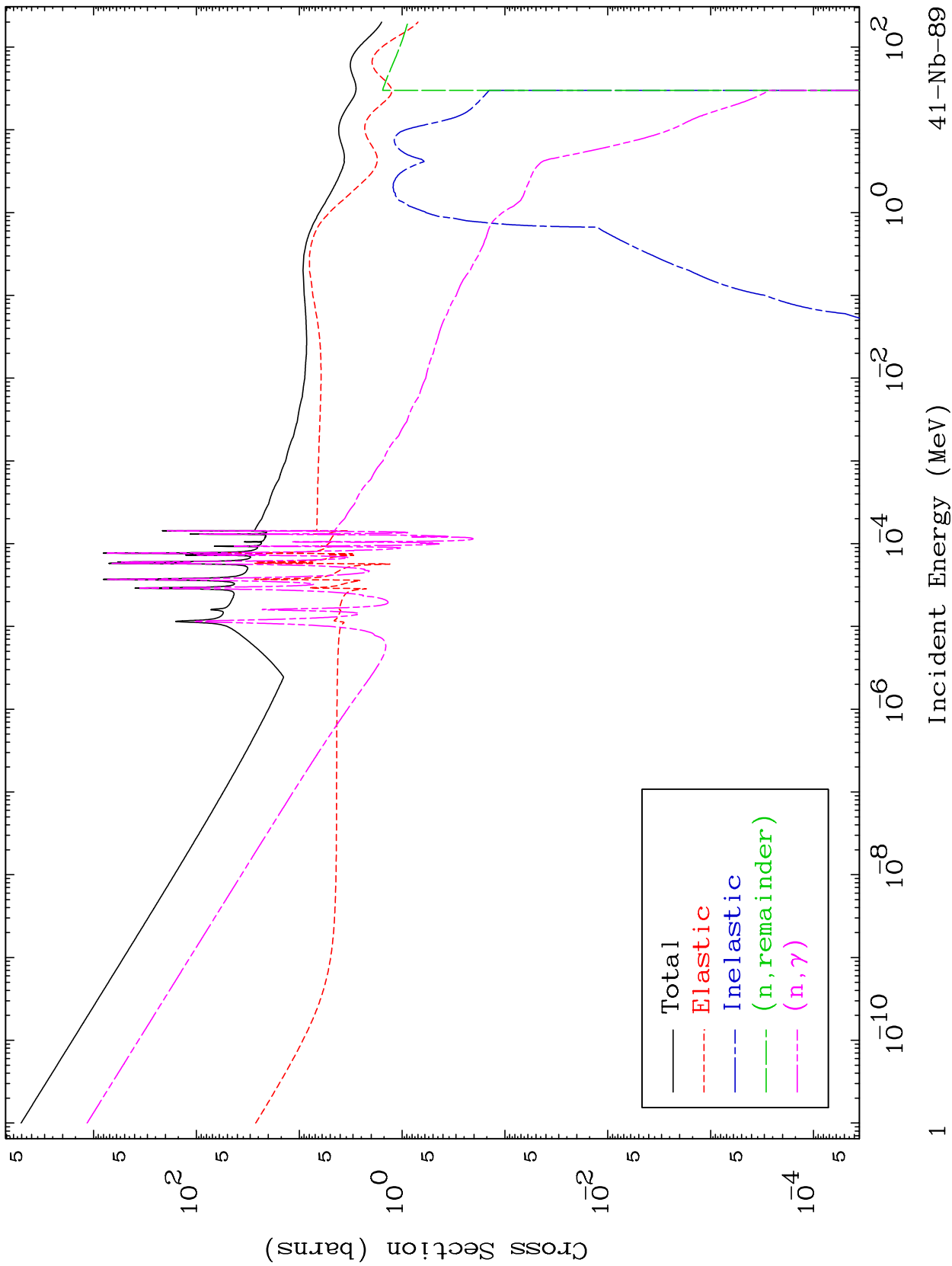
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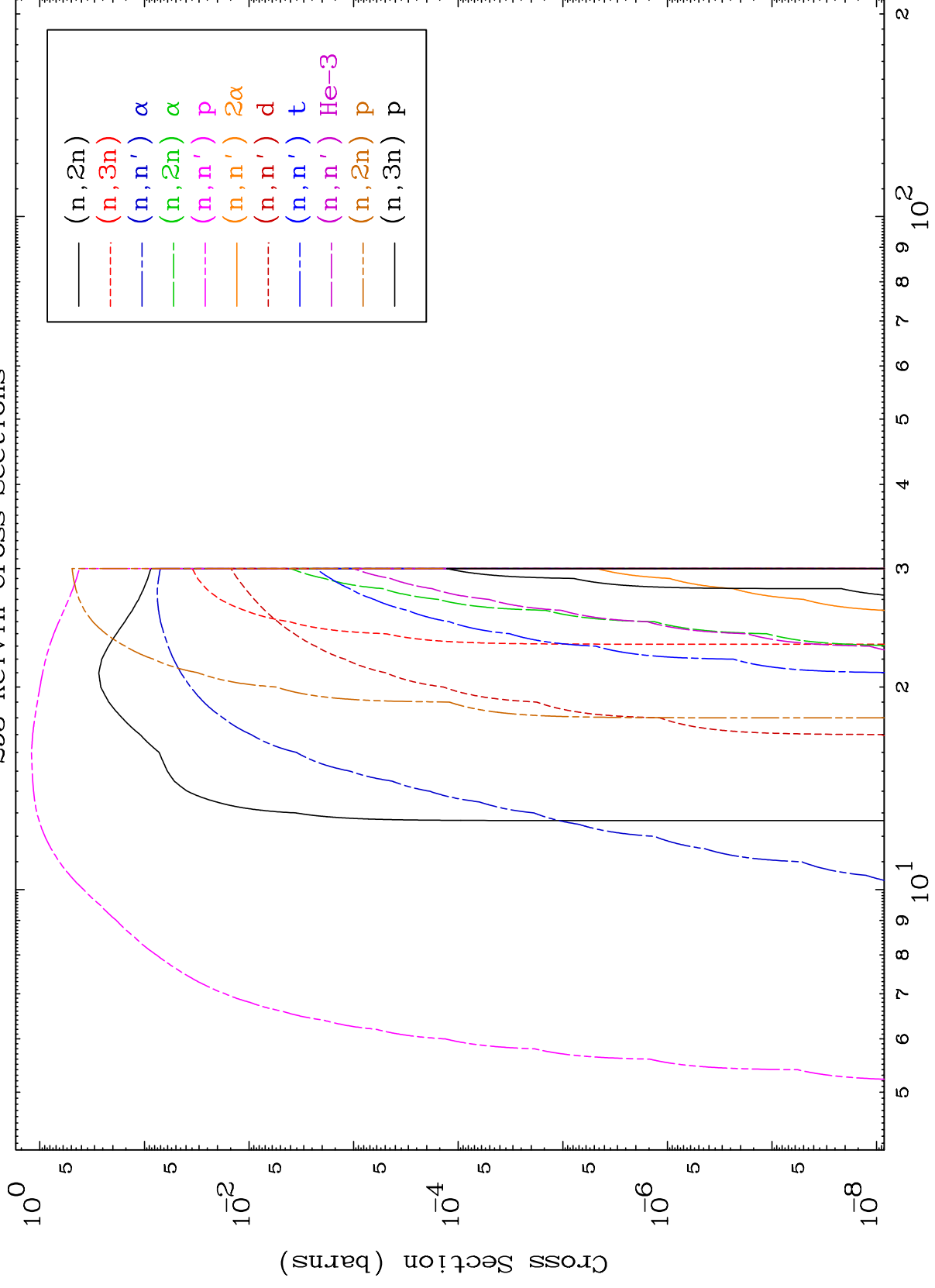
MAT 4113

Major

293 Kelvin Cross Sections

41-Nb-89

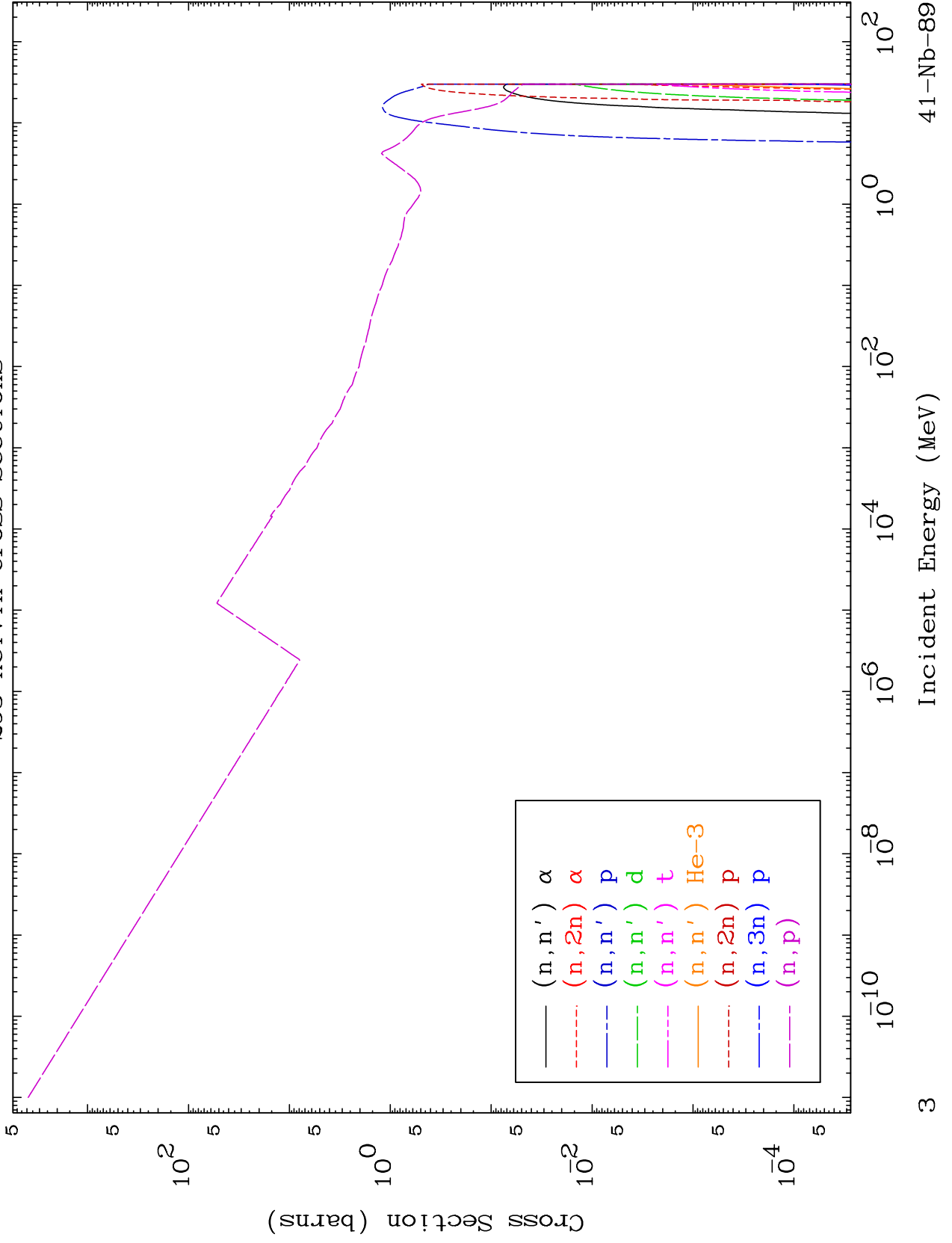




MAT 4113

Charged Particle
293 Kelvin Cross Sections

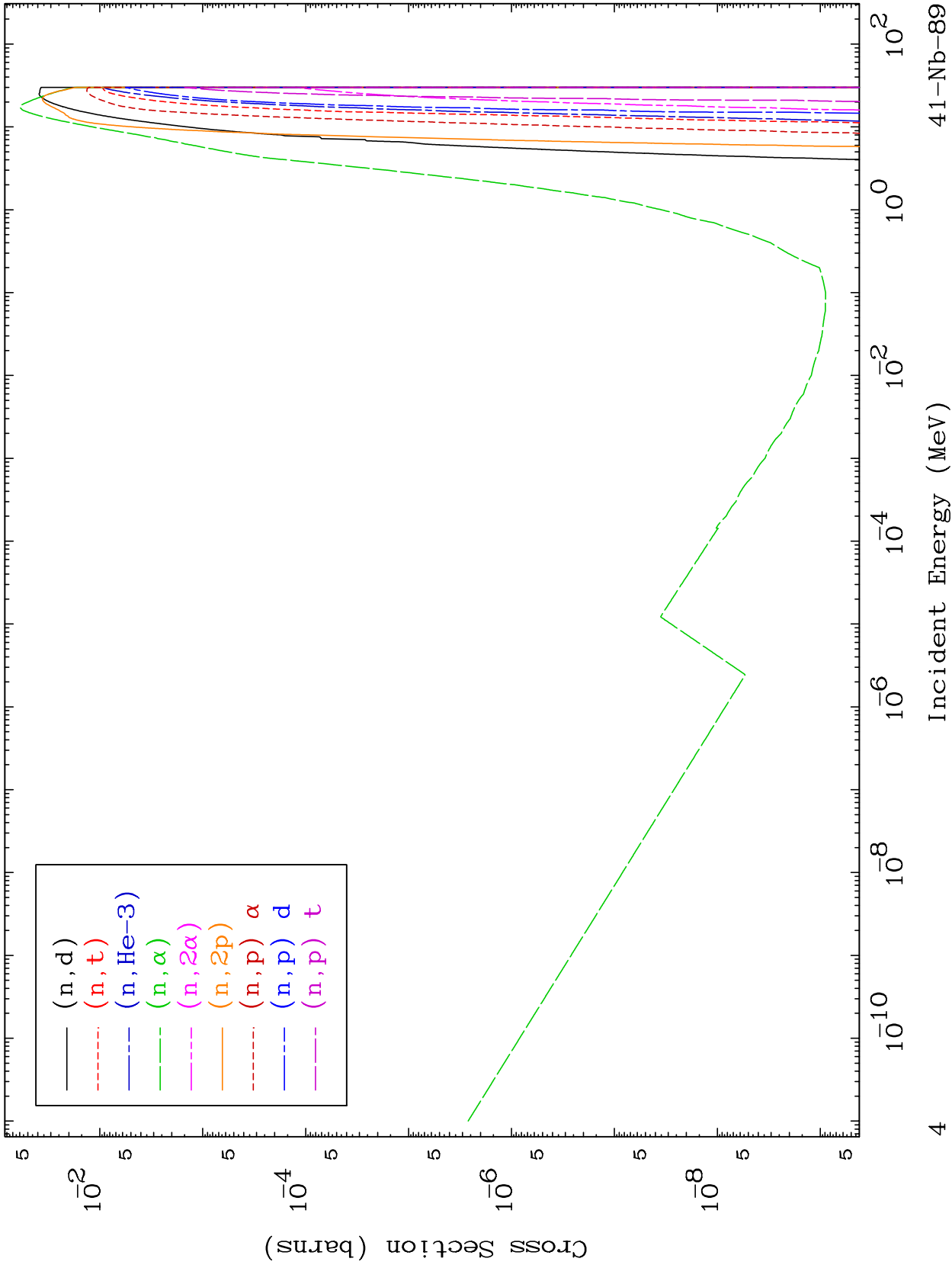
41-Nb-89



MAT 4113

Charged Particle
293 Kelvin Cross Sections

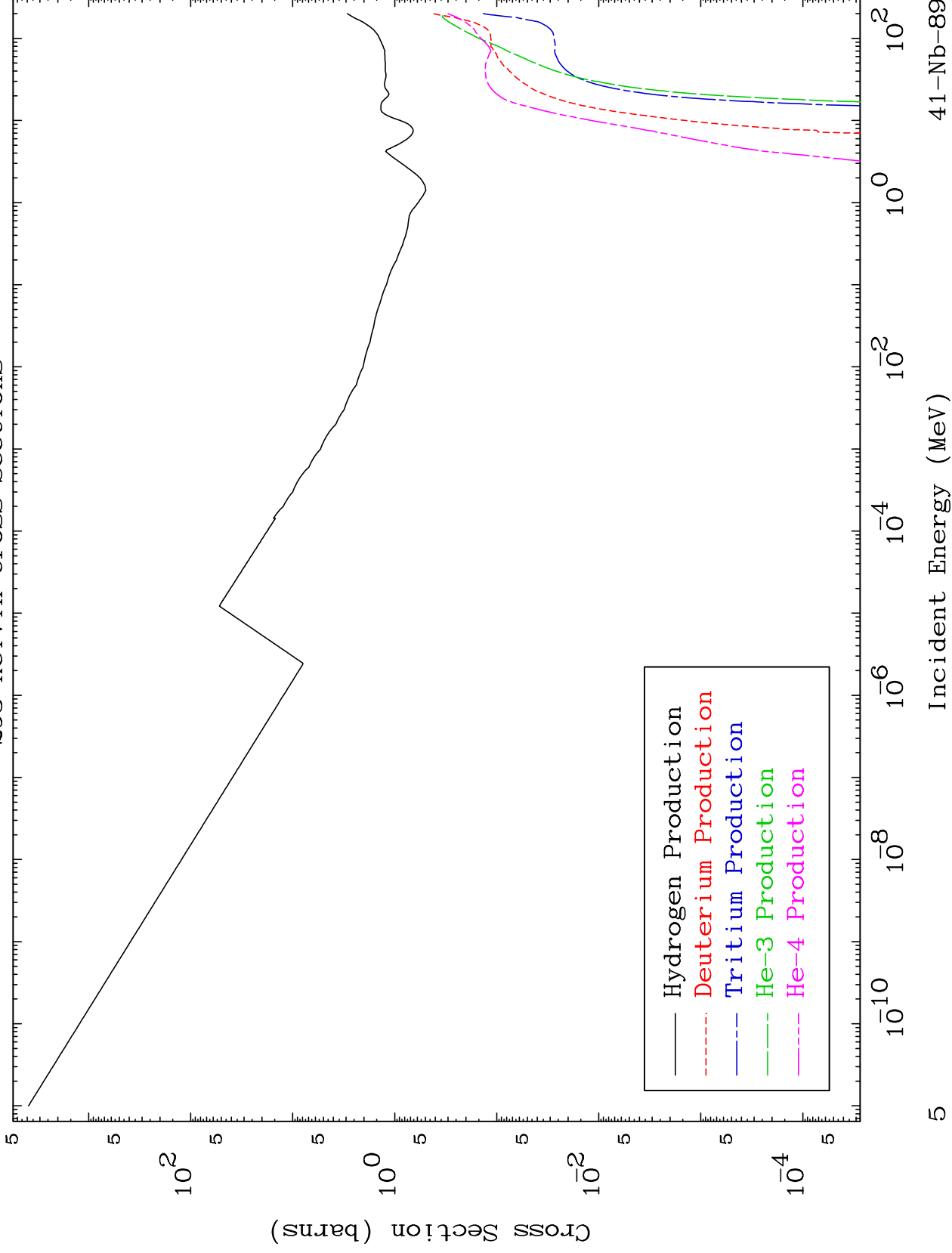
41-Nb-89



MAT 4113

Particle Production
293 Kelvin Cross Sections

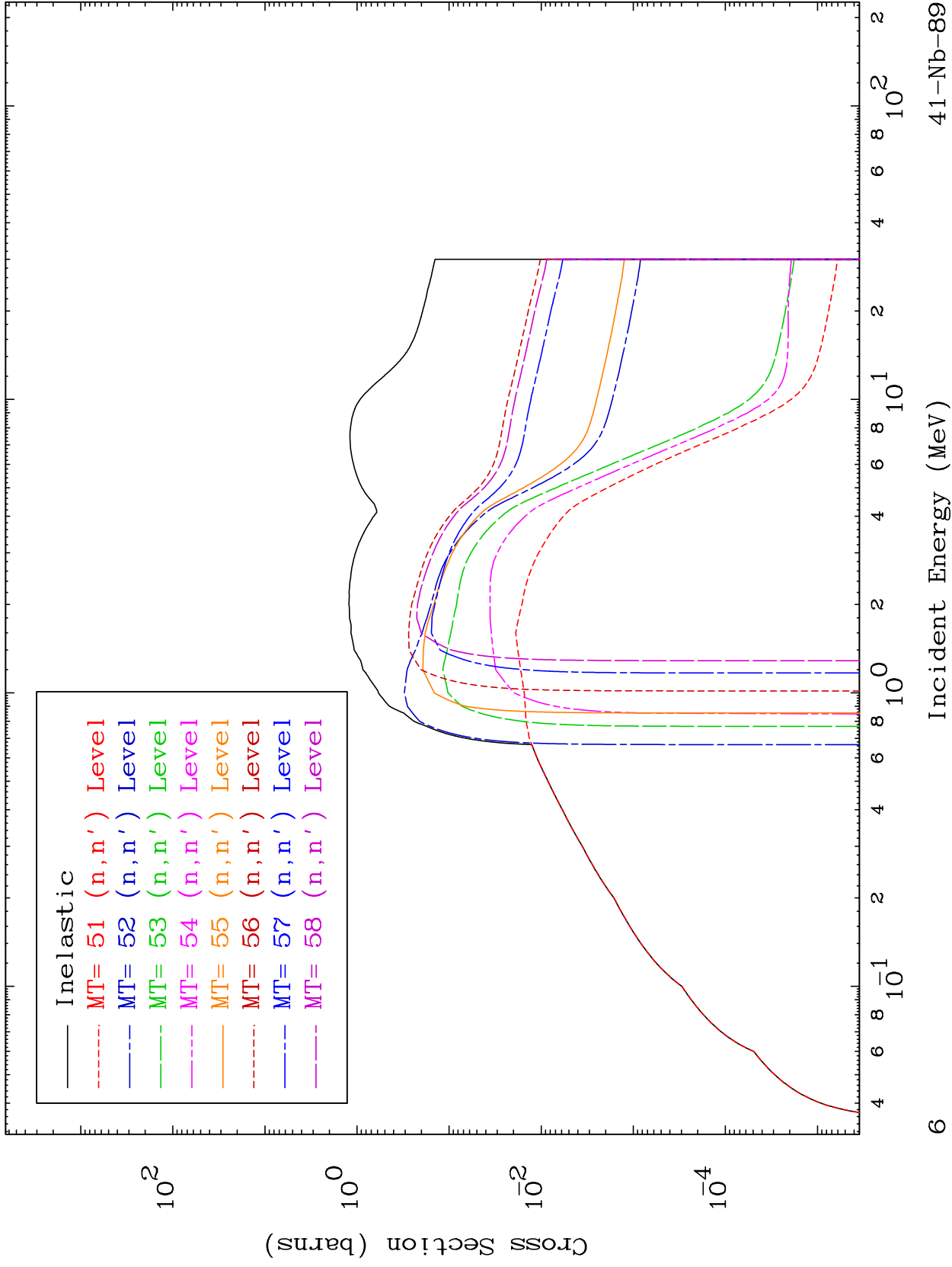
41-Nb-89



MAT 4113

(n,n') Level
293 Kelvin Cross Sections

41-Nb-89

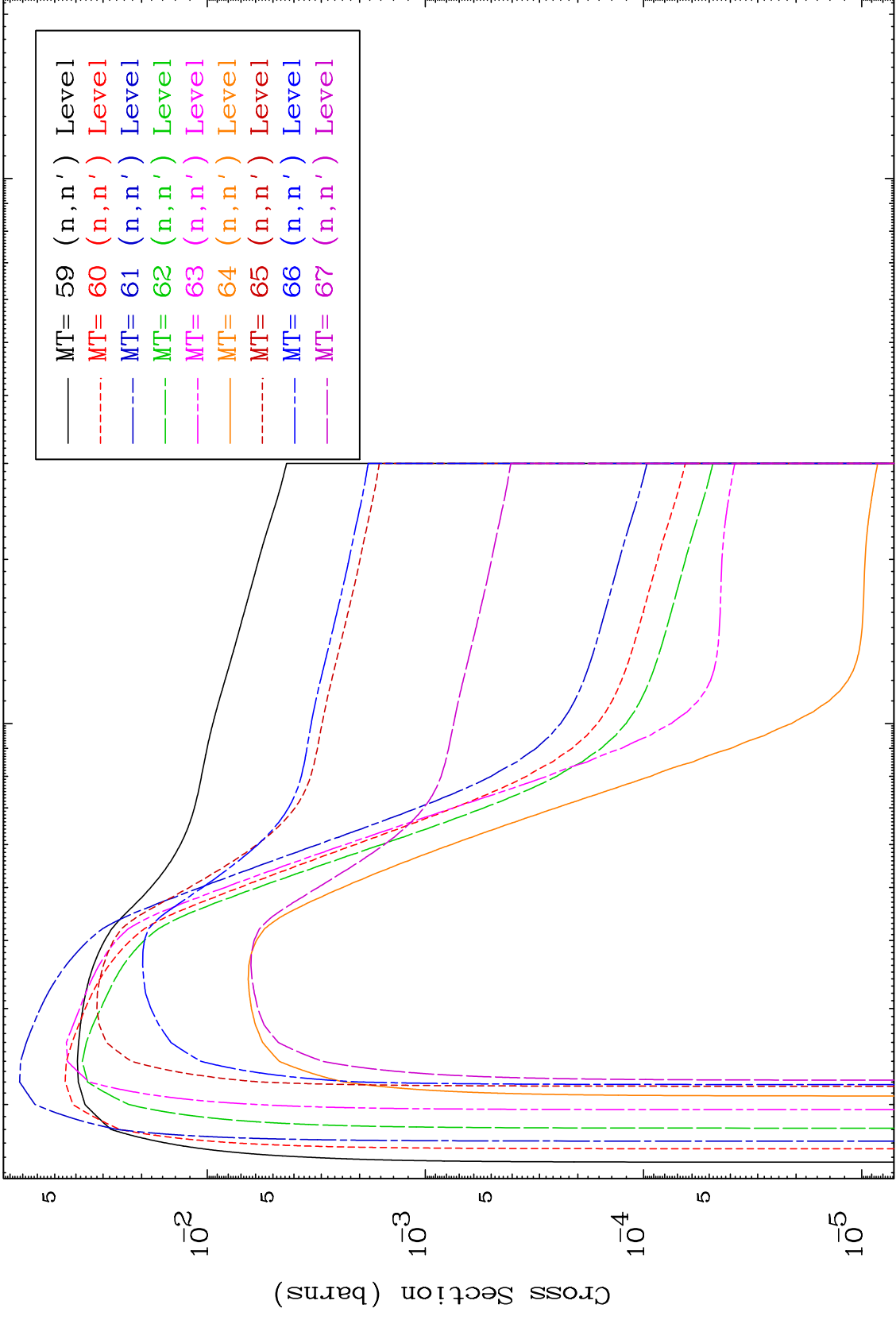


MAT 4113

(n,n') Level

41-Nb-89

293 Kelvin Cross Sections



7

Incident Energy (MeV)

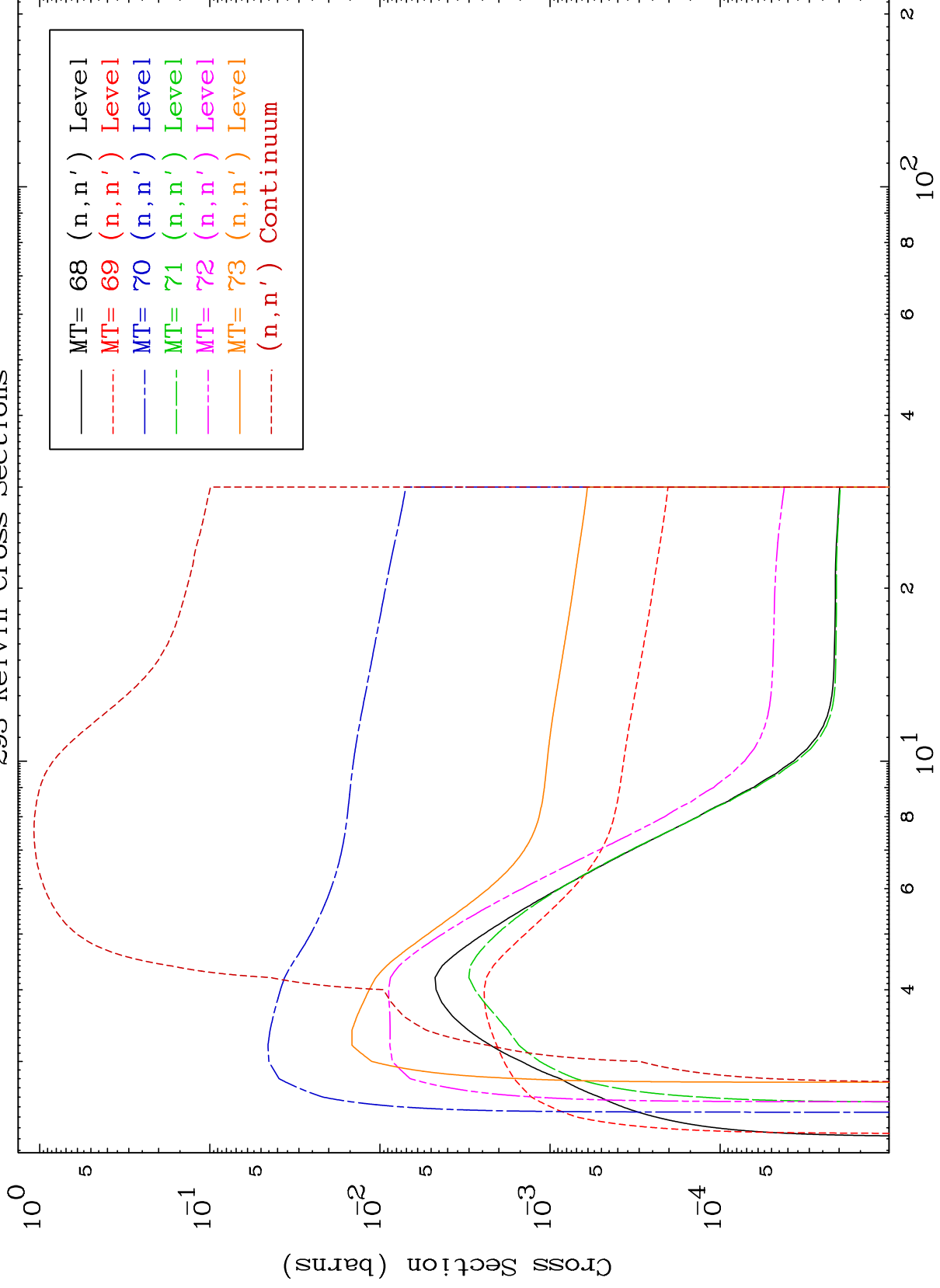
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MAT 4113

(n,n') Level

41-Nb-89

293 Kelvin Cross Sections



8

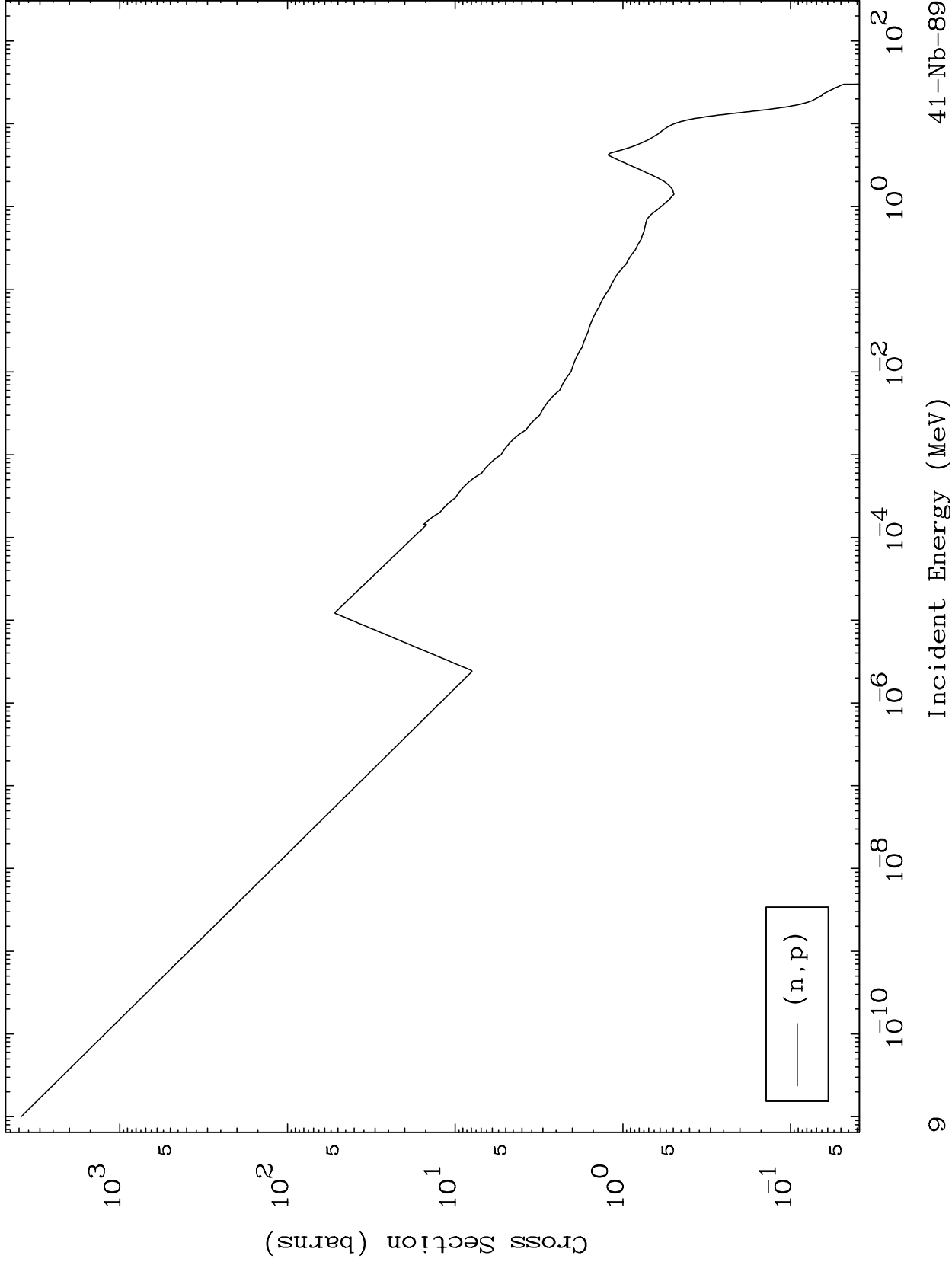
Incident Energy (MeV)

41-Nb-89

MAT 4113

(n,p) Levels
293 Kelvin Cross Sections

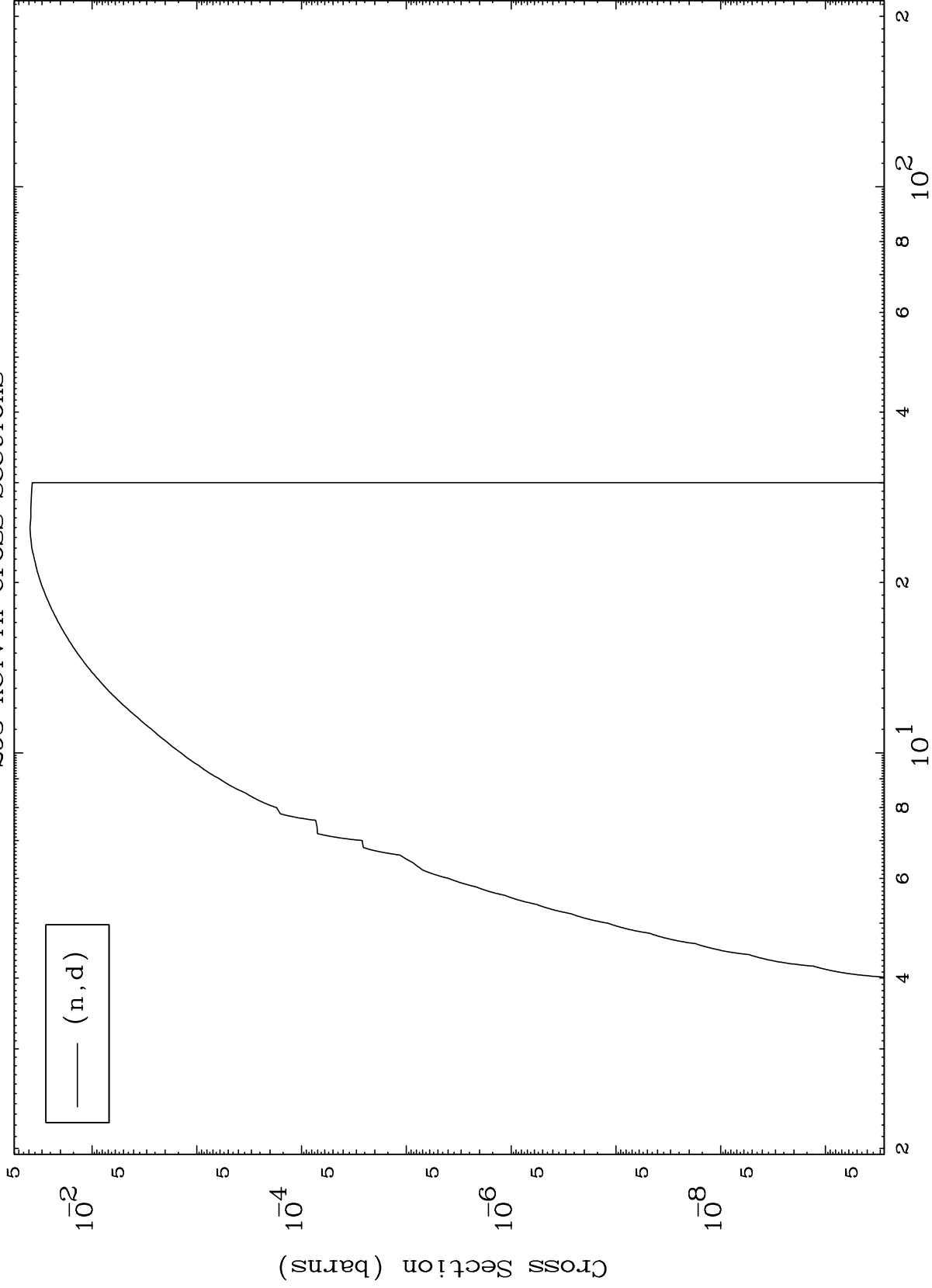
41-Nb-89



MAT 4113

(n,d) Levels
293 Kelvin Cross Sections

41-Nb-89



10

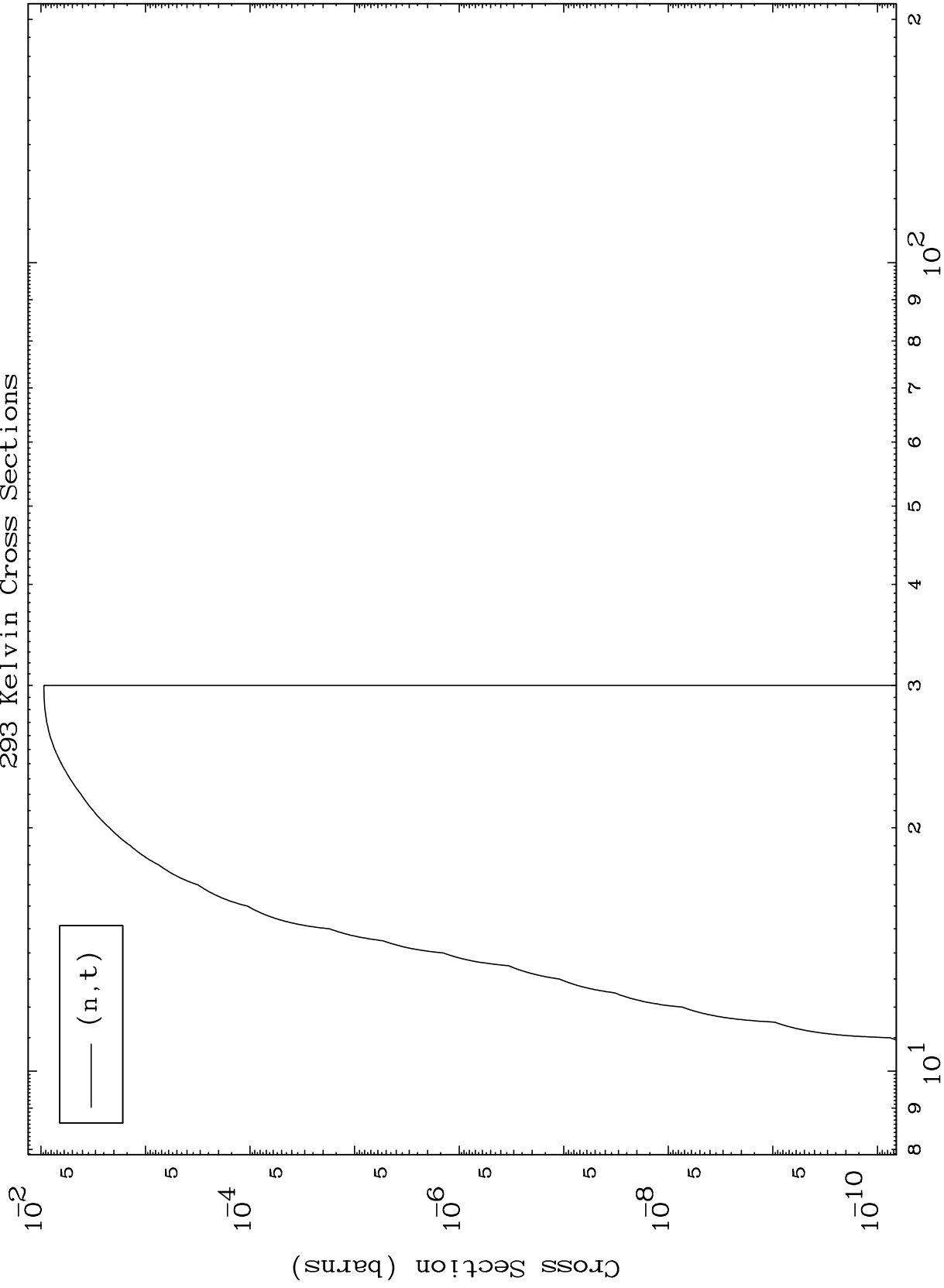
Incident Energy (MeV)

41-Nb-89

MAT 4113

(n,t) Levels
293 Kelvin Cross Sections

41-Nb-89



11

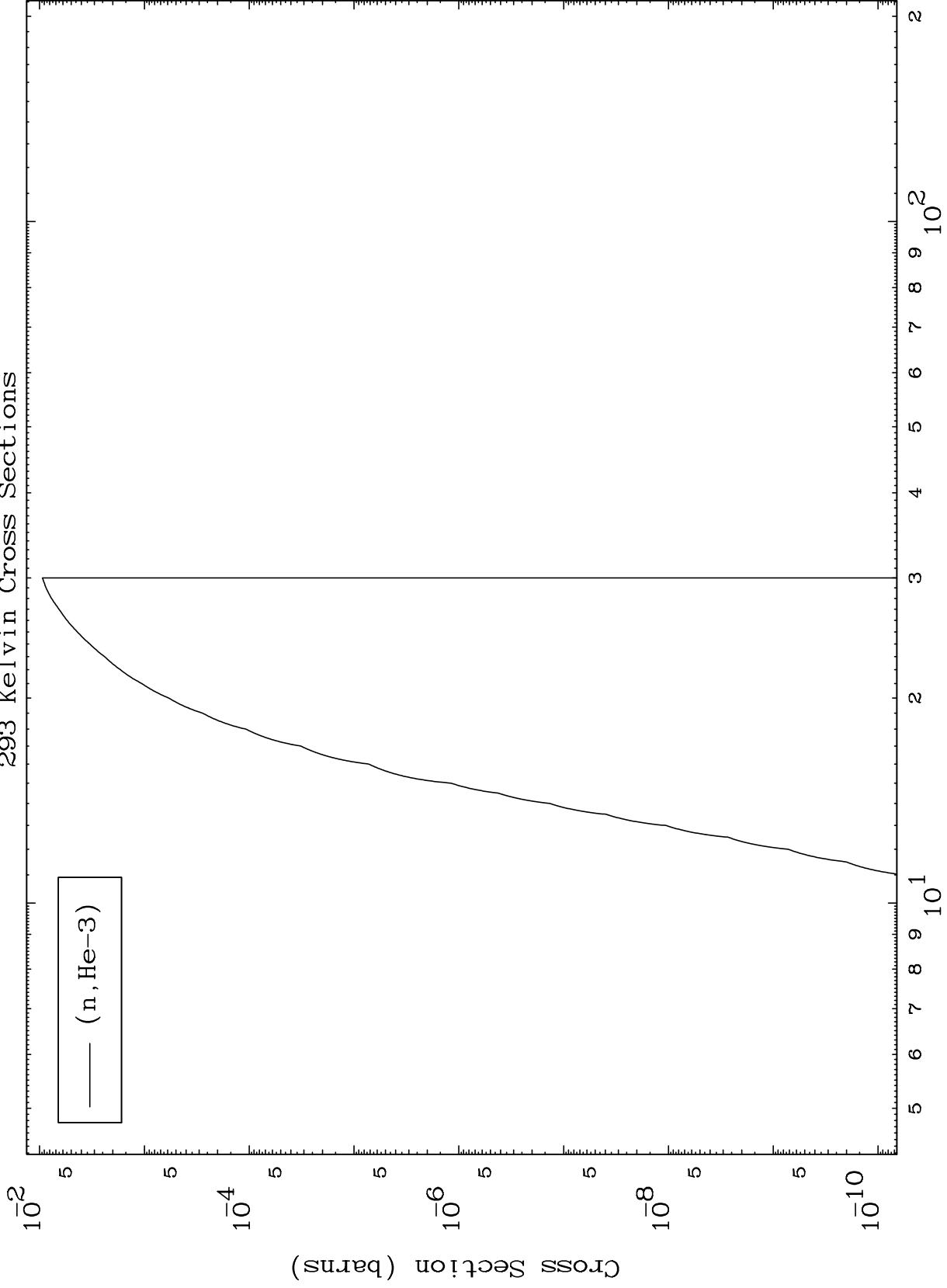
Incident Energy (MeV)

41-Nb-89

MAT 4113

(n,He3) Levels
293 Kelvin Cross Sections

41-Nb-89



12

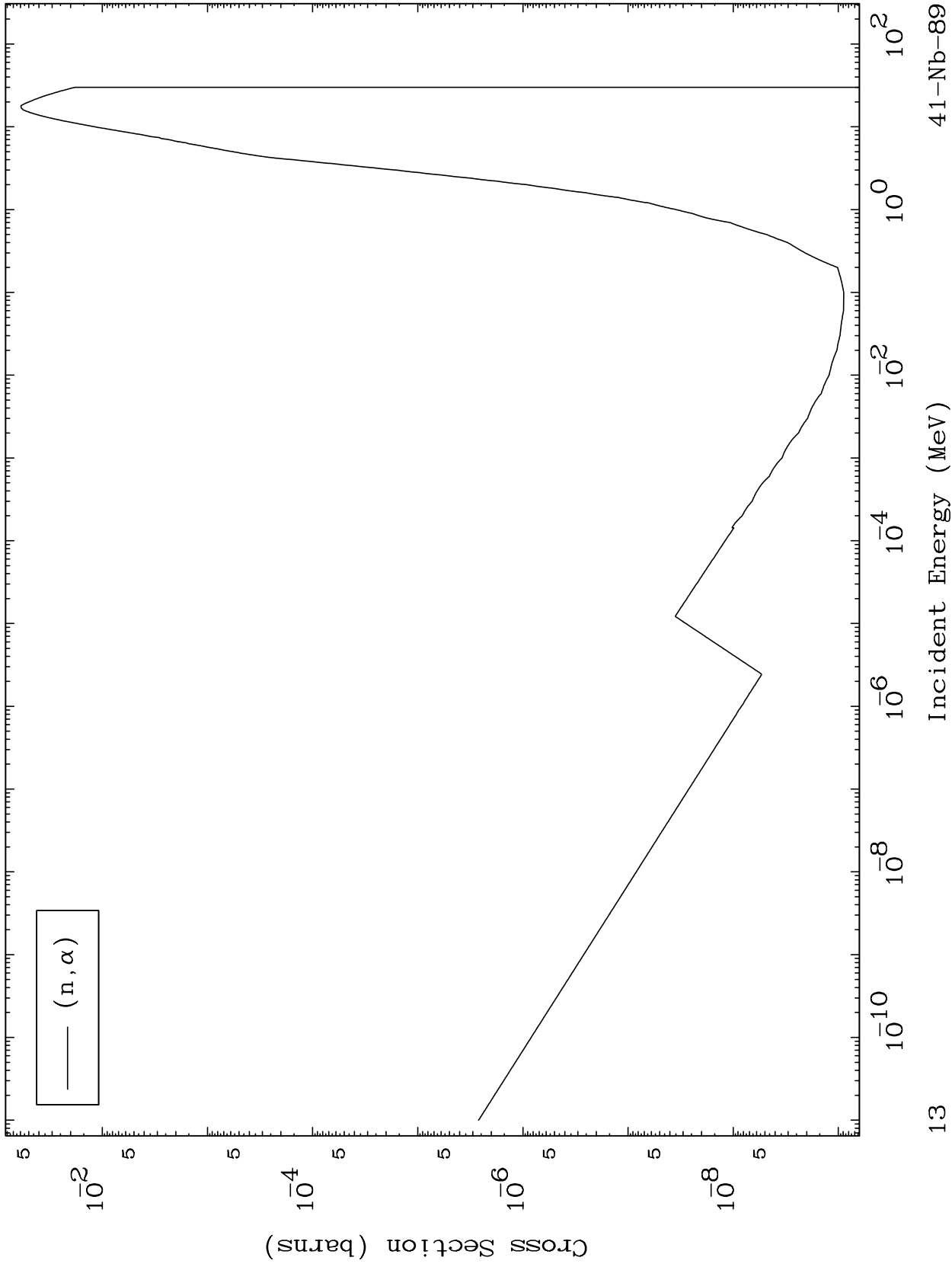
Incident Energy (MeV)

41-Nb-89

MAT 4113

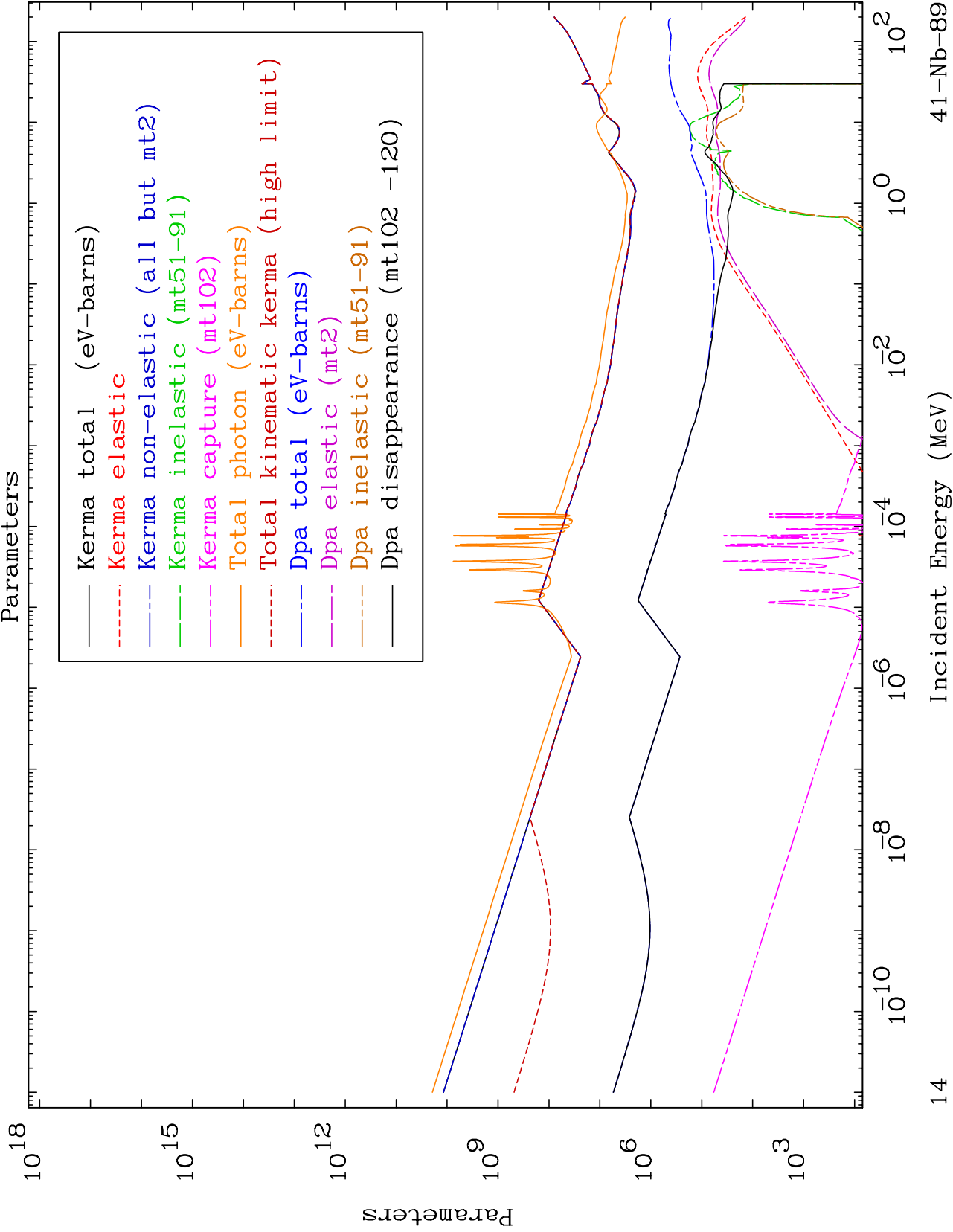
(n, α) Levels
293 Kelvin Cross Sections

41-Nb-89



13

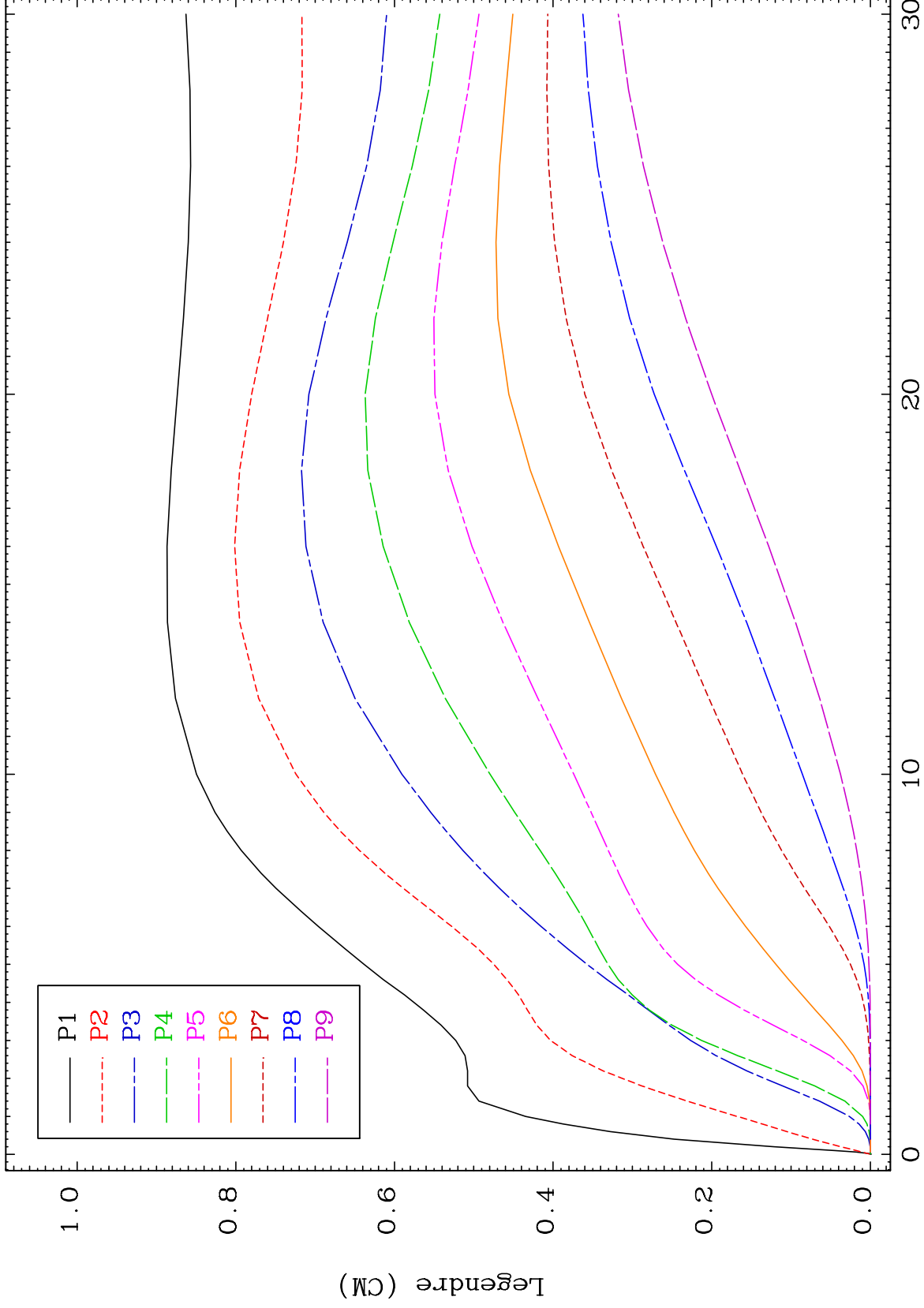
41-Nb-89



MAT 4113

Elastic Legendre Coefficients

41-Nb-89



15

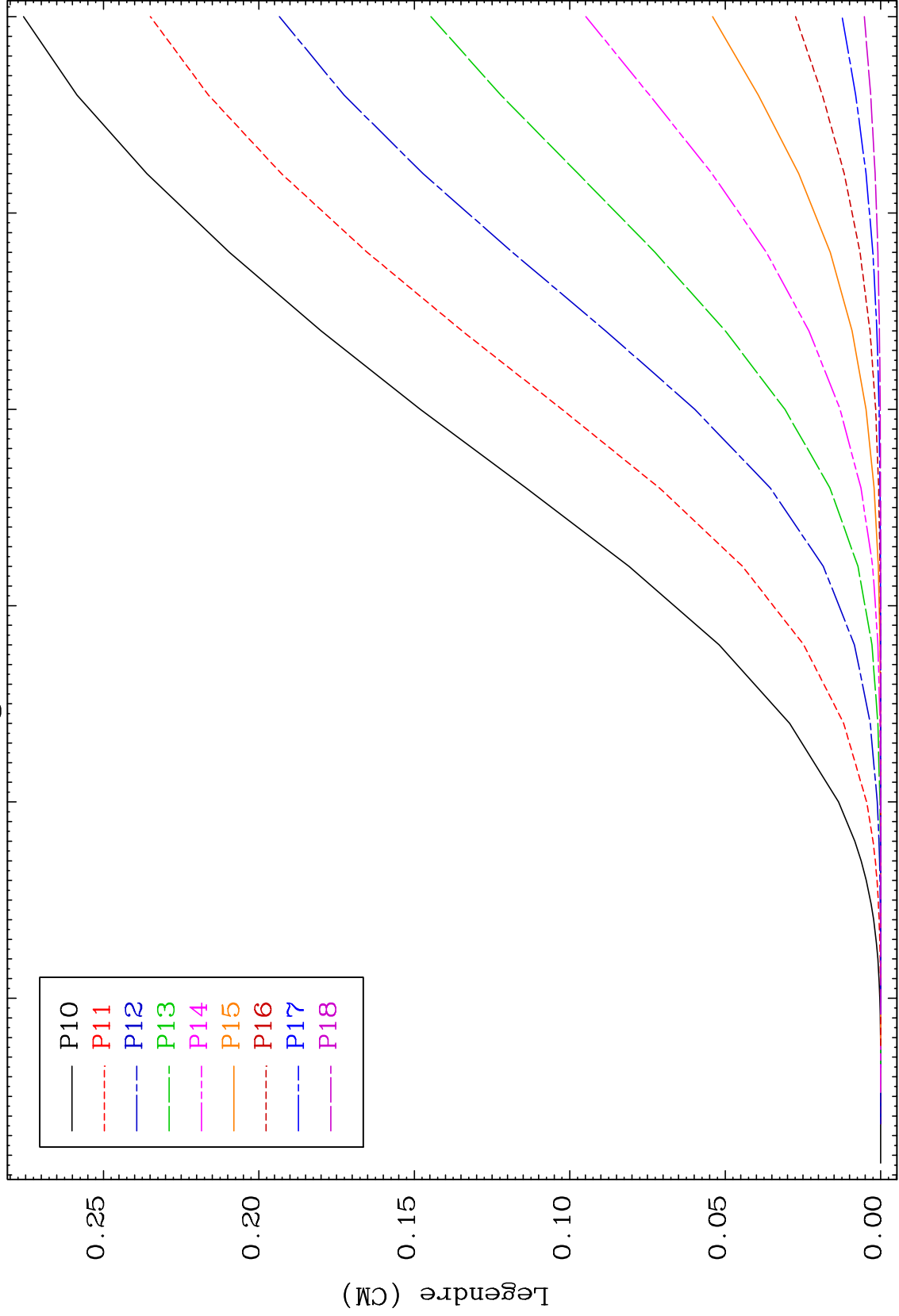
Incident Energy (MeV)

41-Nb-89

MAT 4113

Elastic
Legendre Coefficients

41-Nb-89



16

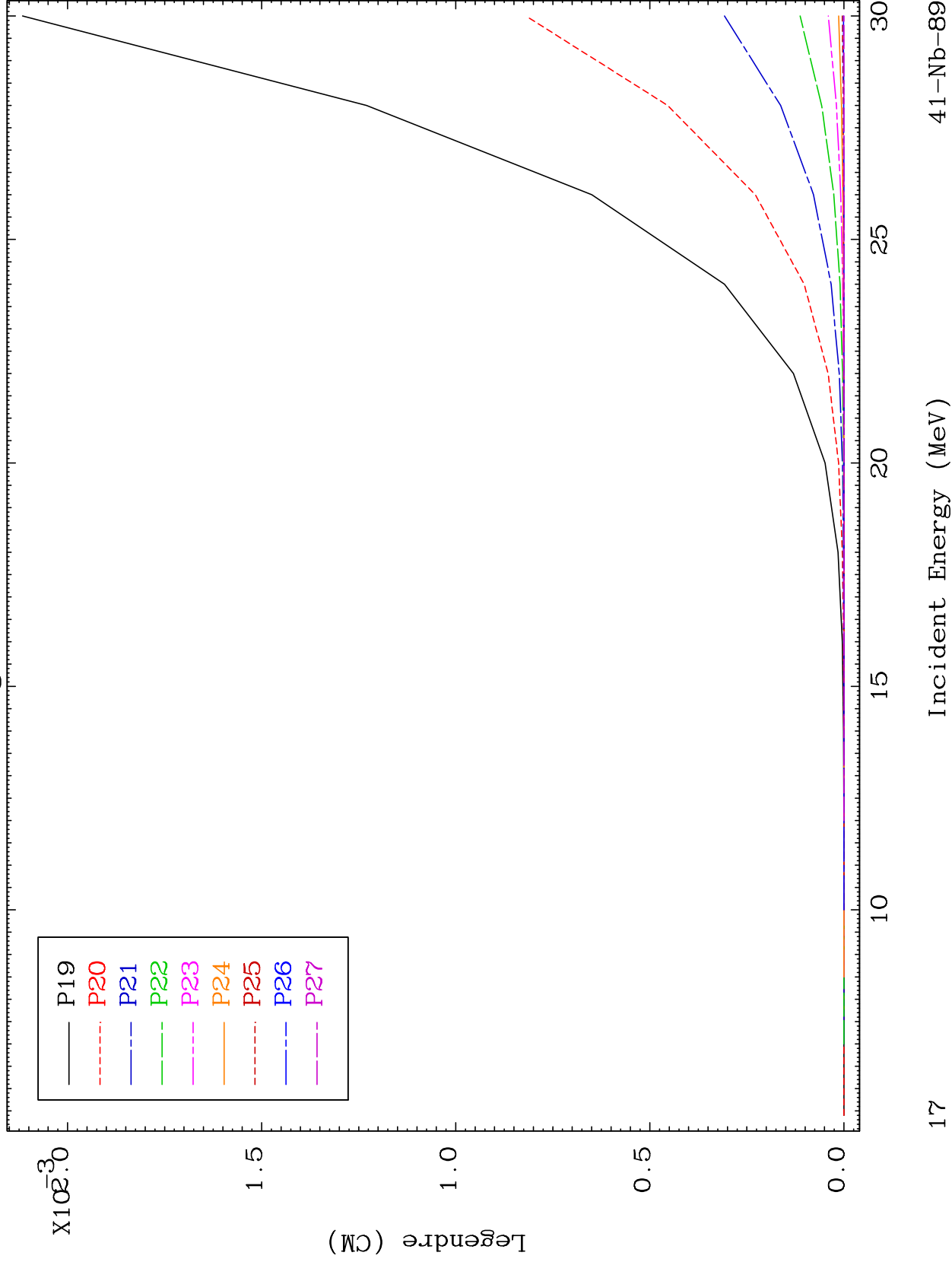
Incident Energy (MeV)

41-Nb-89

MAT 4113

Elastic Legendre Coefficients

41-Nb-89



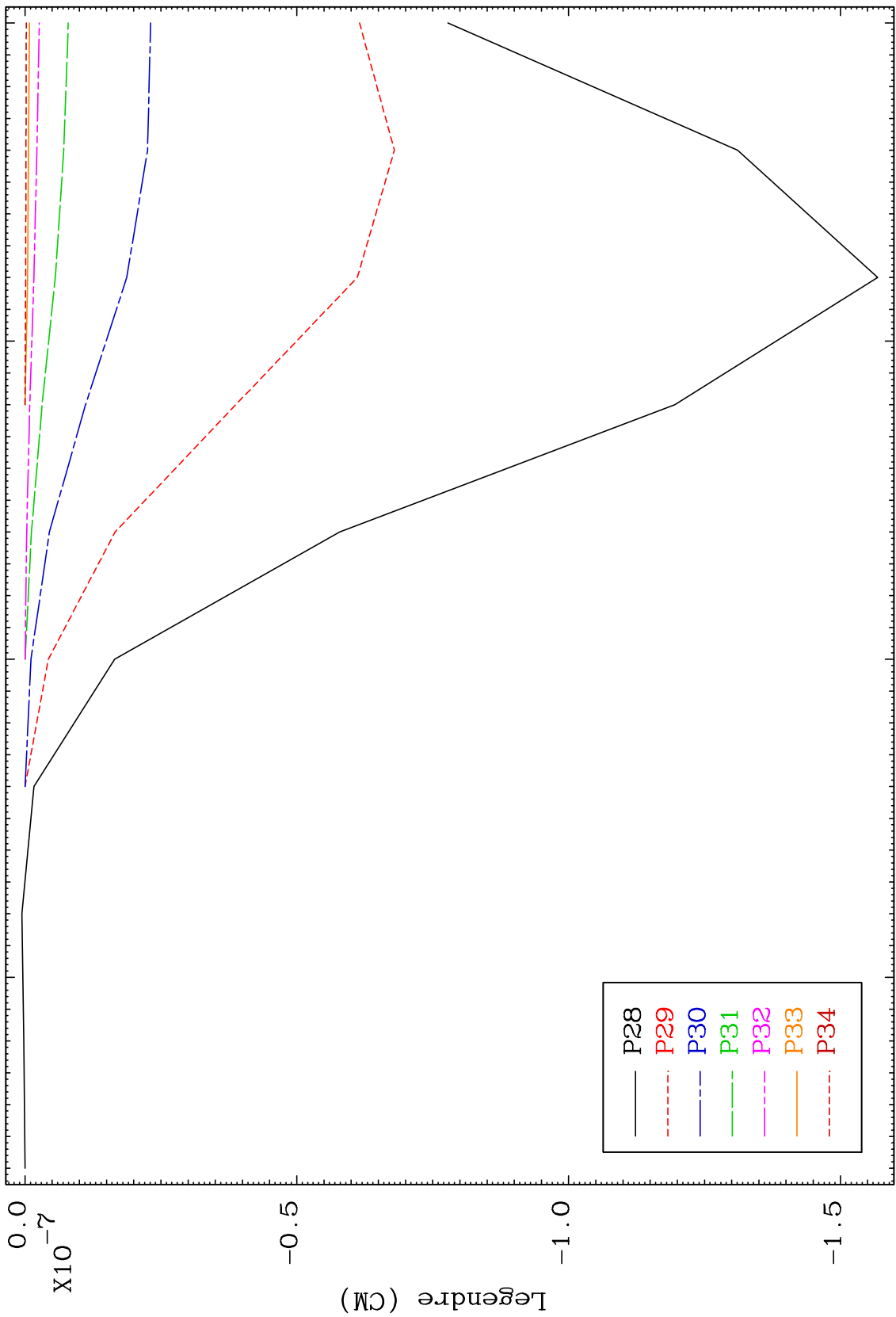
17

41-Nb-89

MAT 4113

41-Nb-89

Elastic Legendre Coefficients



18

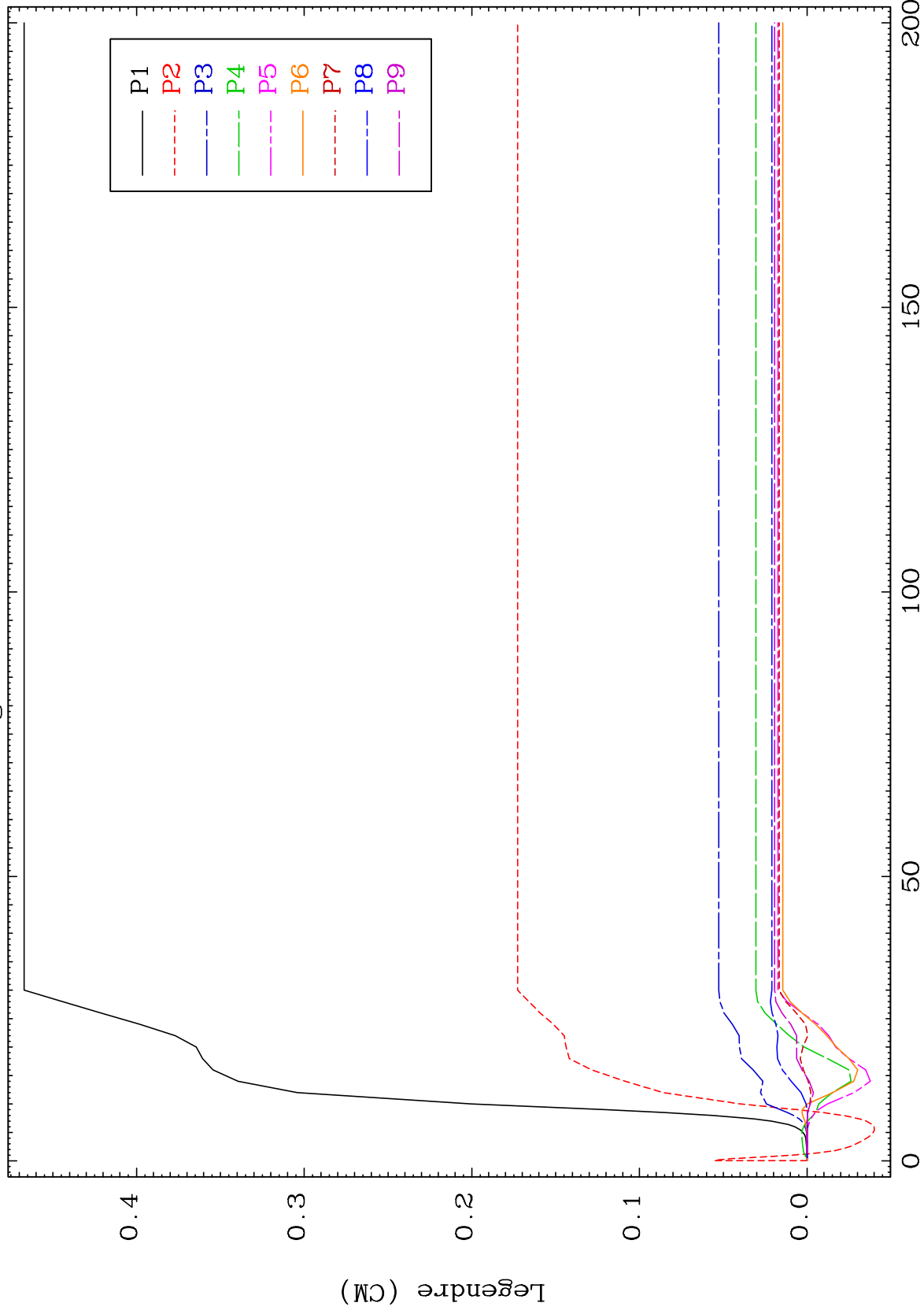
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



41-Nb-89

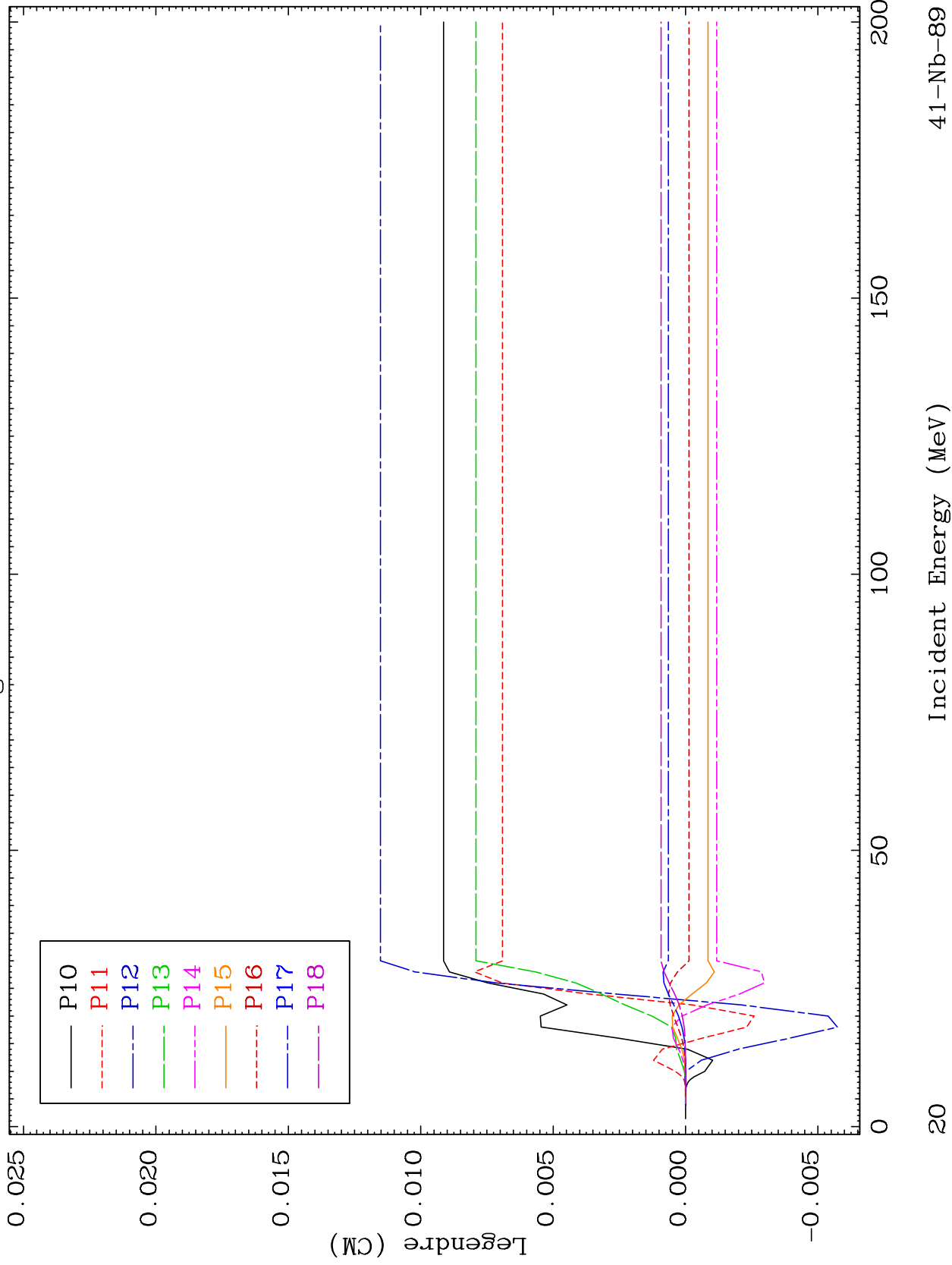
Incident Energy (MeV)

19

MAT 4113

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

41-Nb-89



41-Nb-89

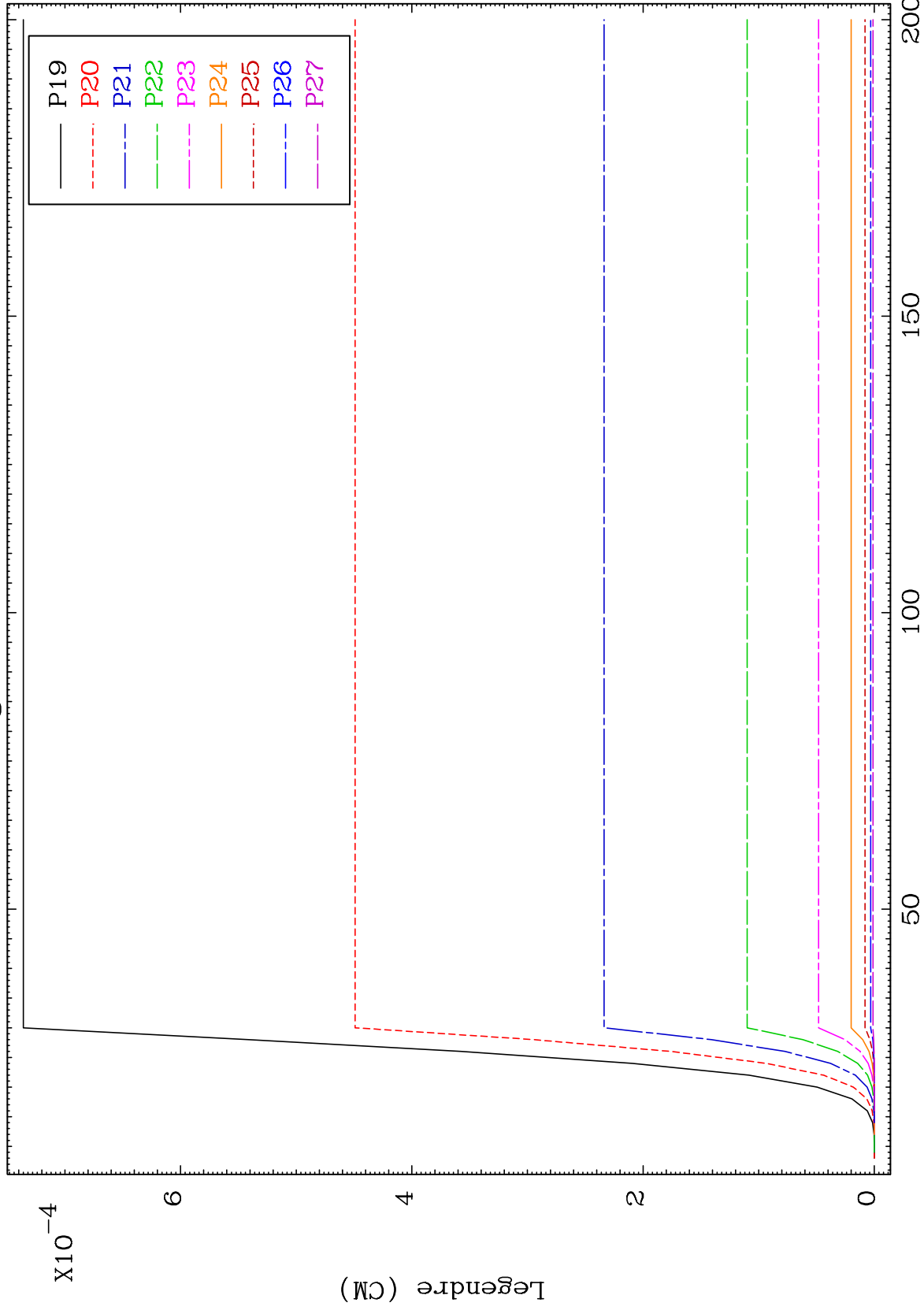
Incident Energy (MeV)

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MAT 4113

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

41-Nb-89



21

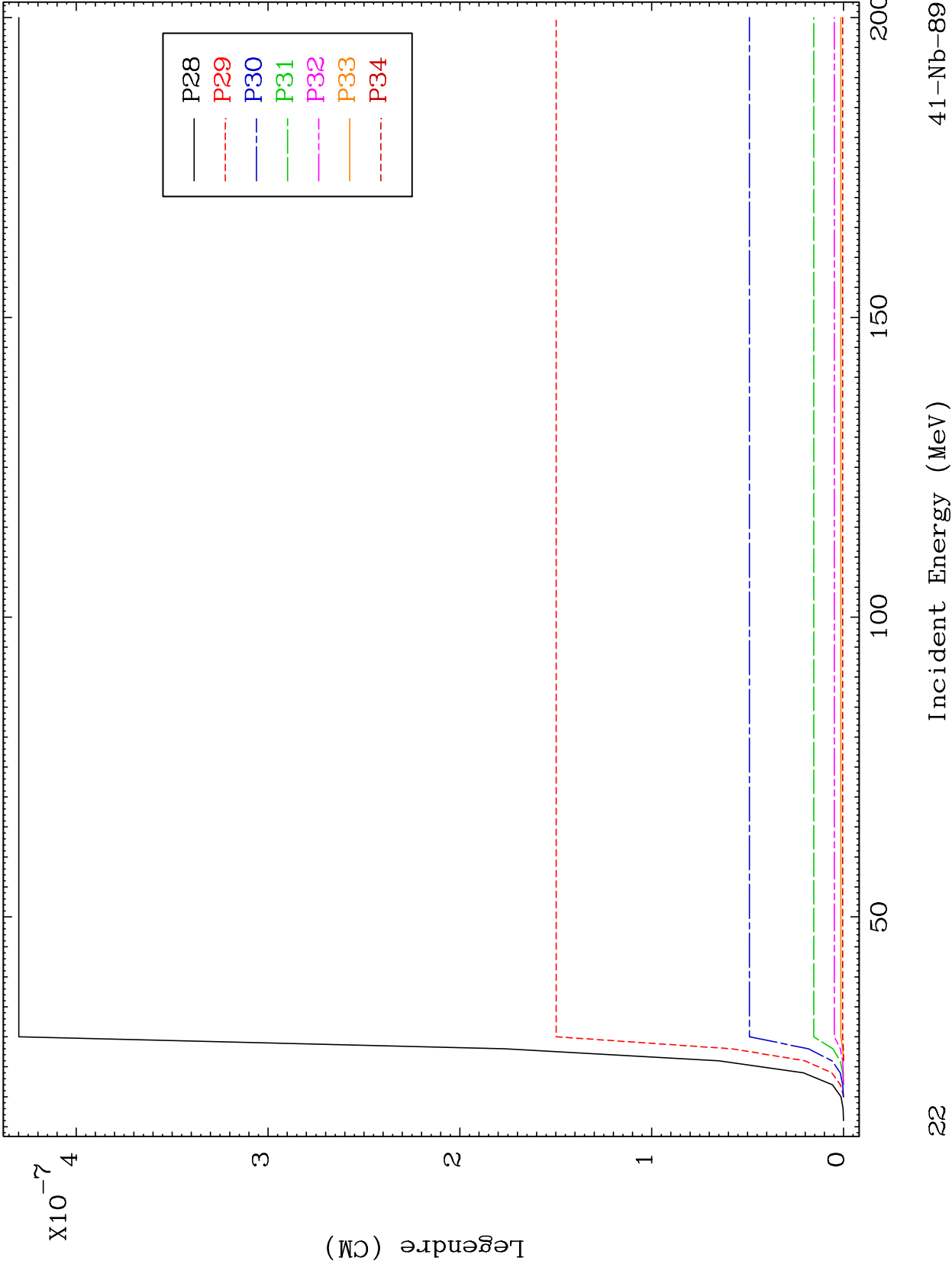
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



22

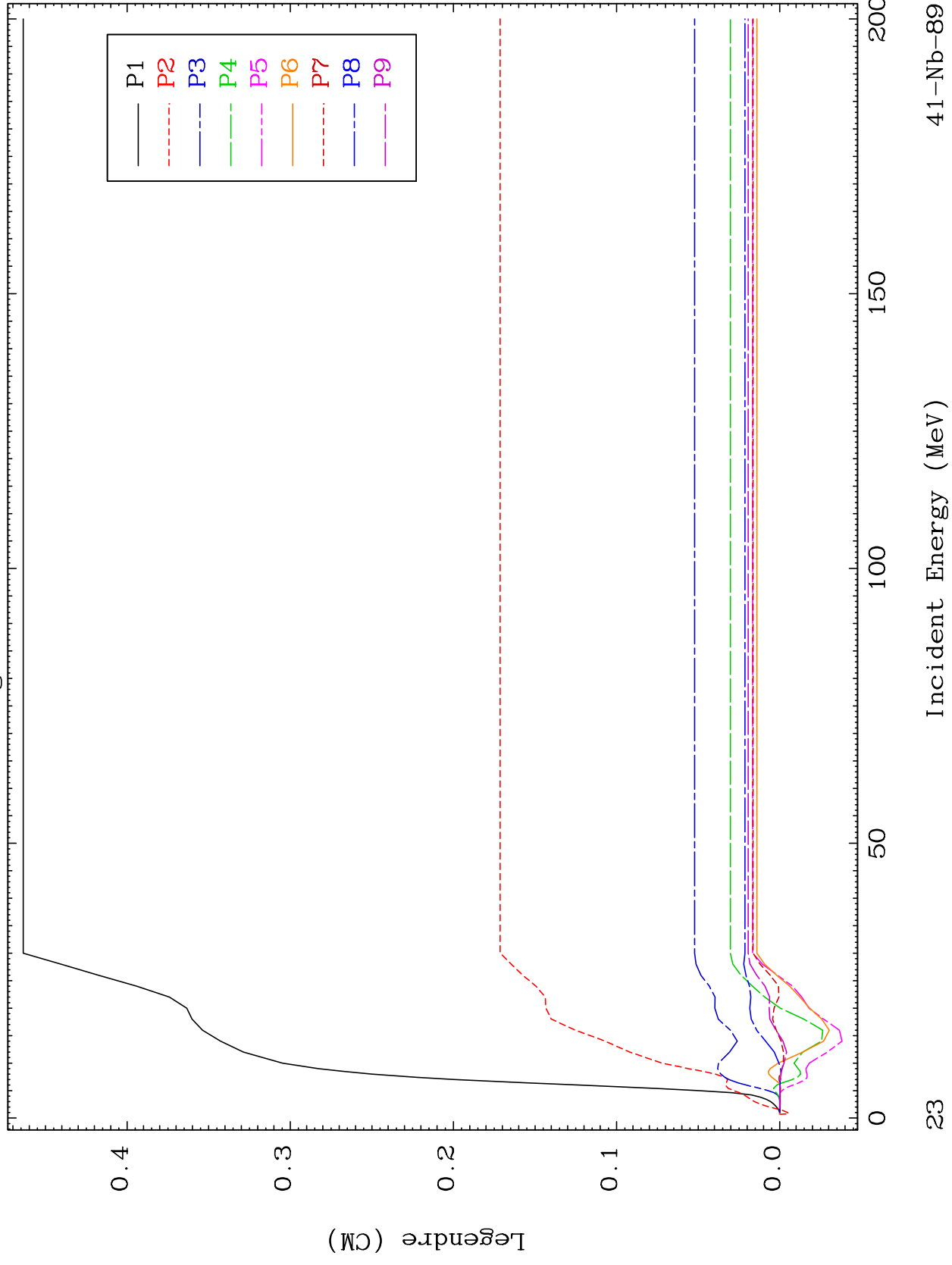
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

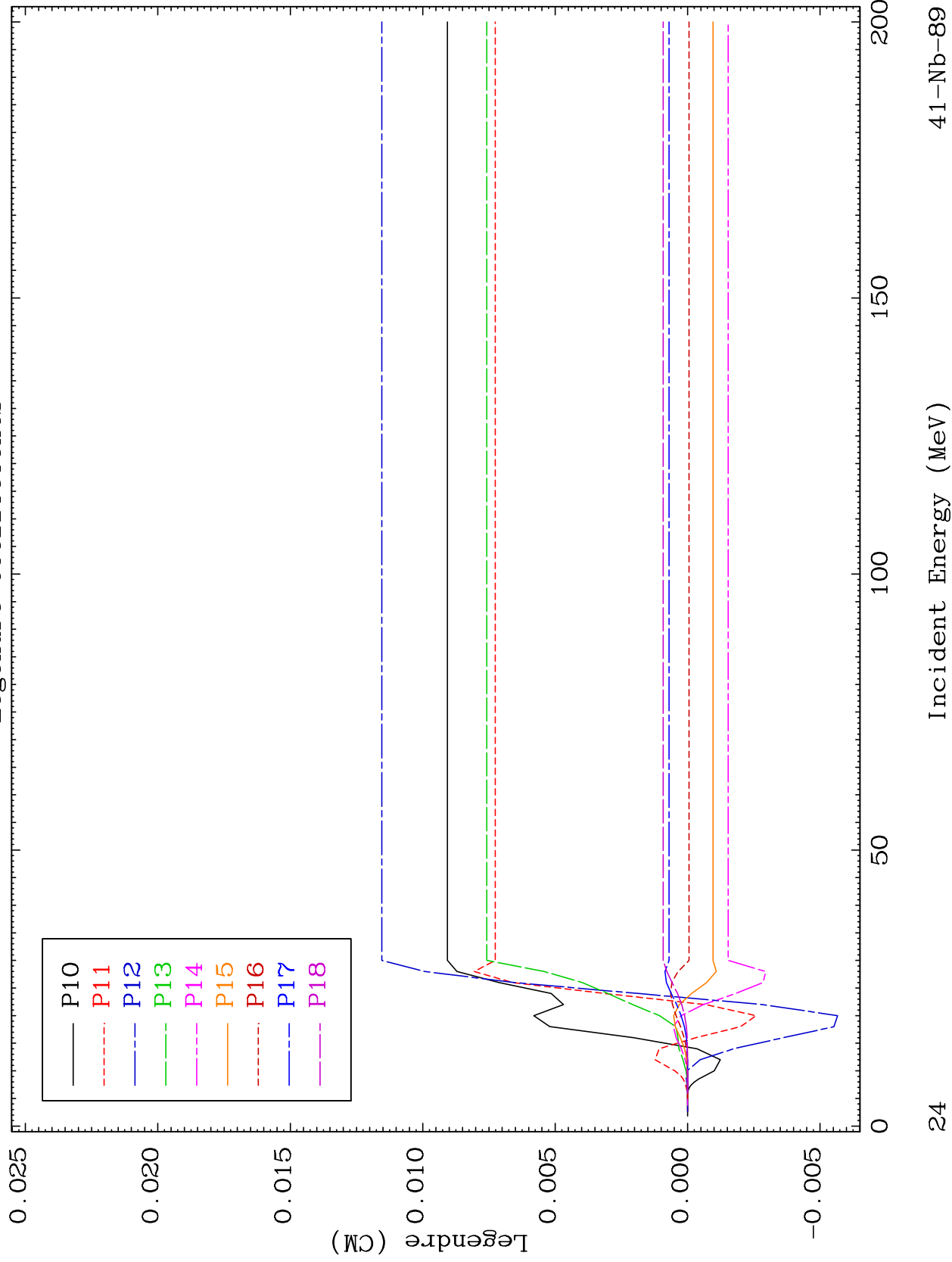
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MAT 4113

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

41-Nb-89



24

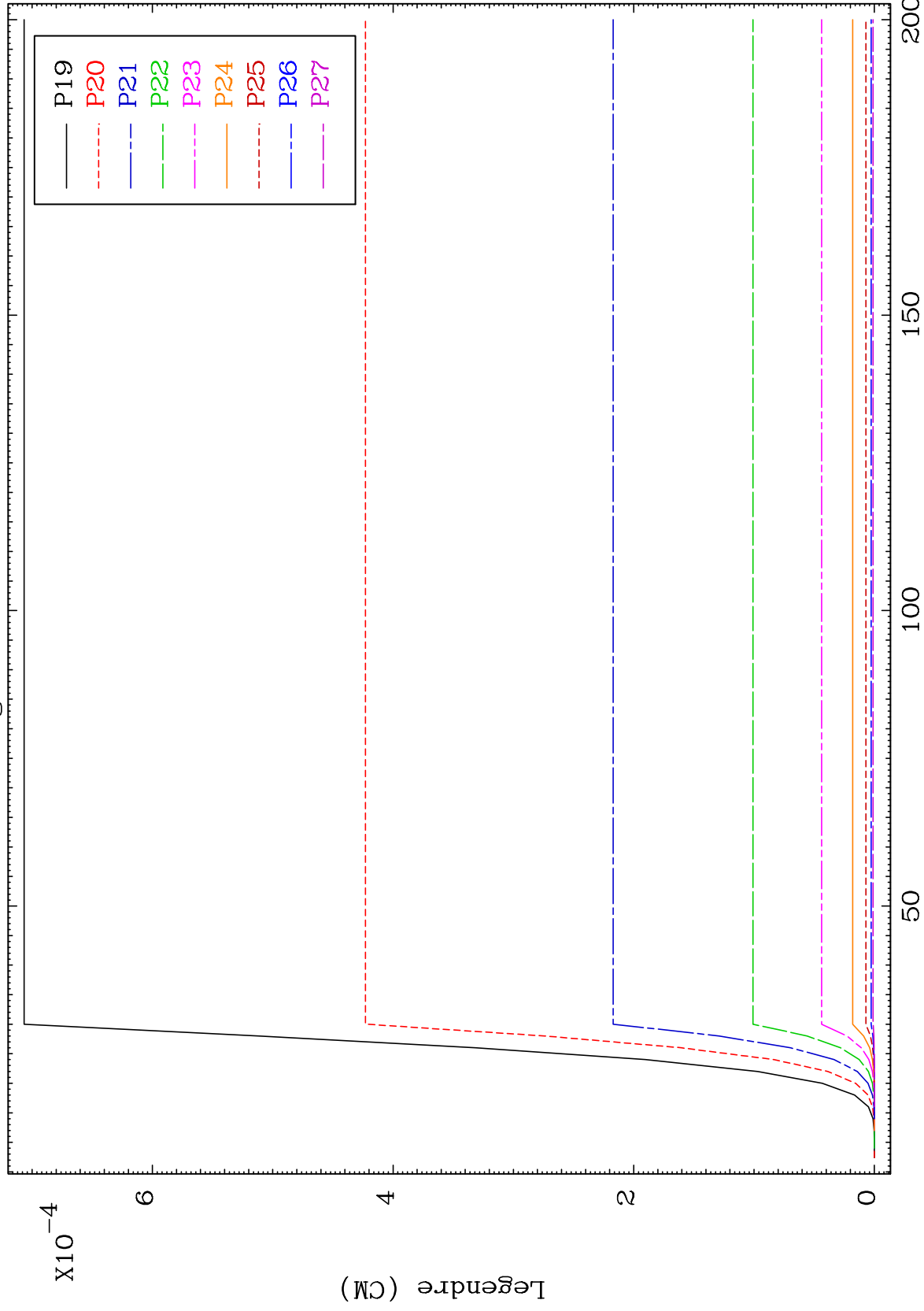
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



25

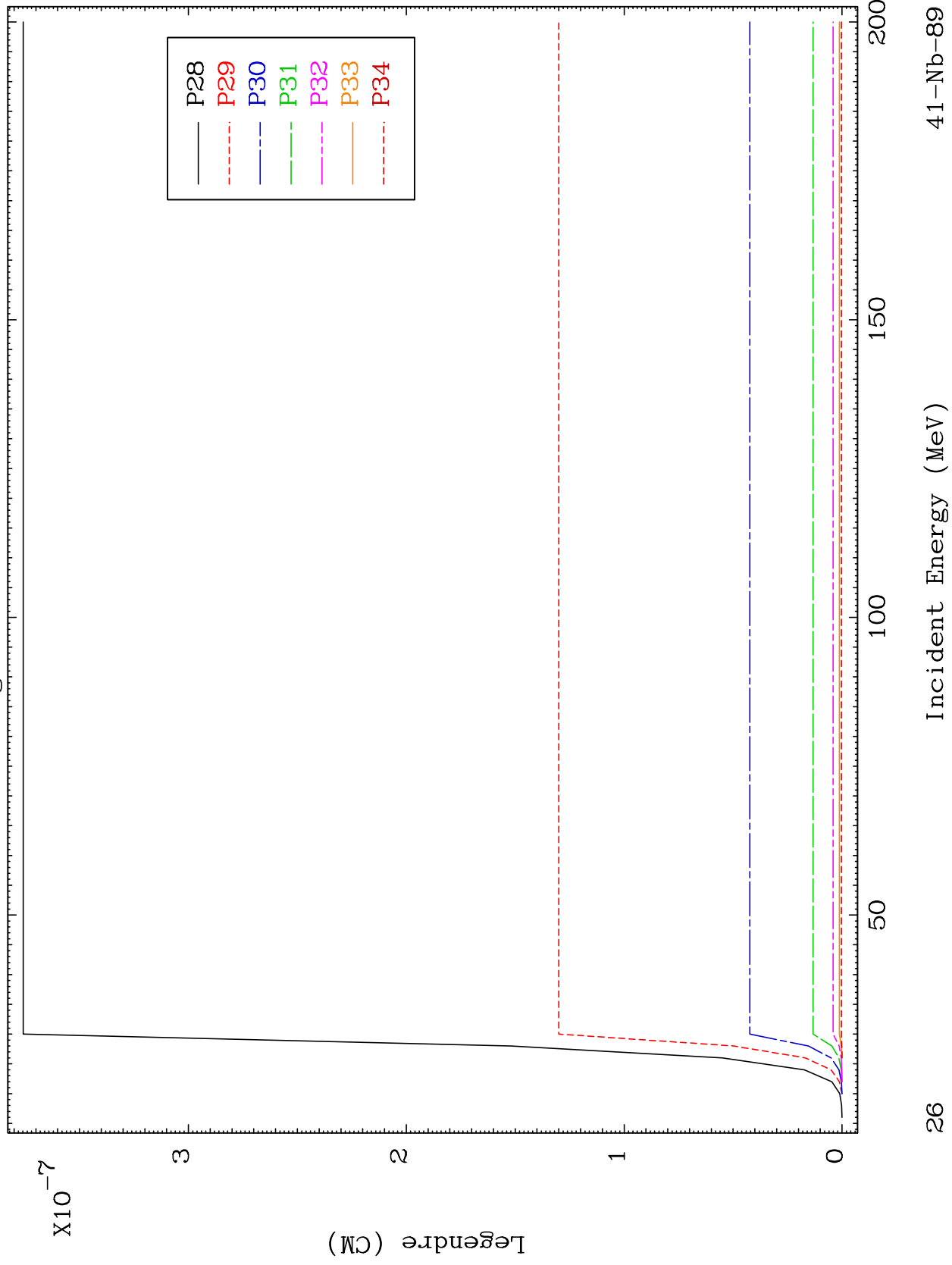
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



26

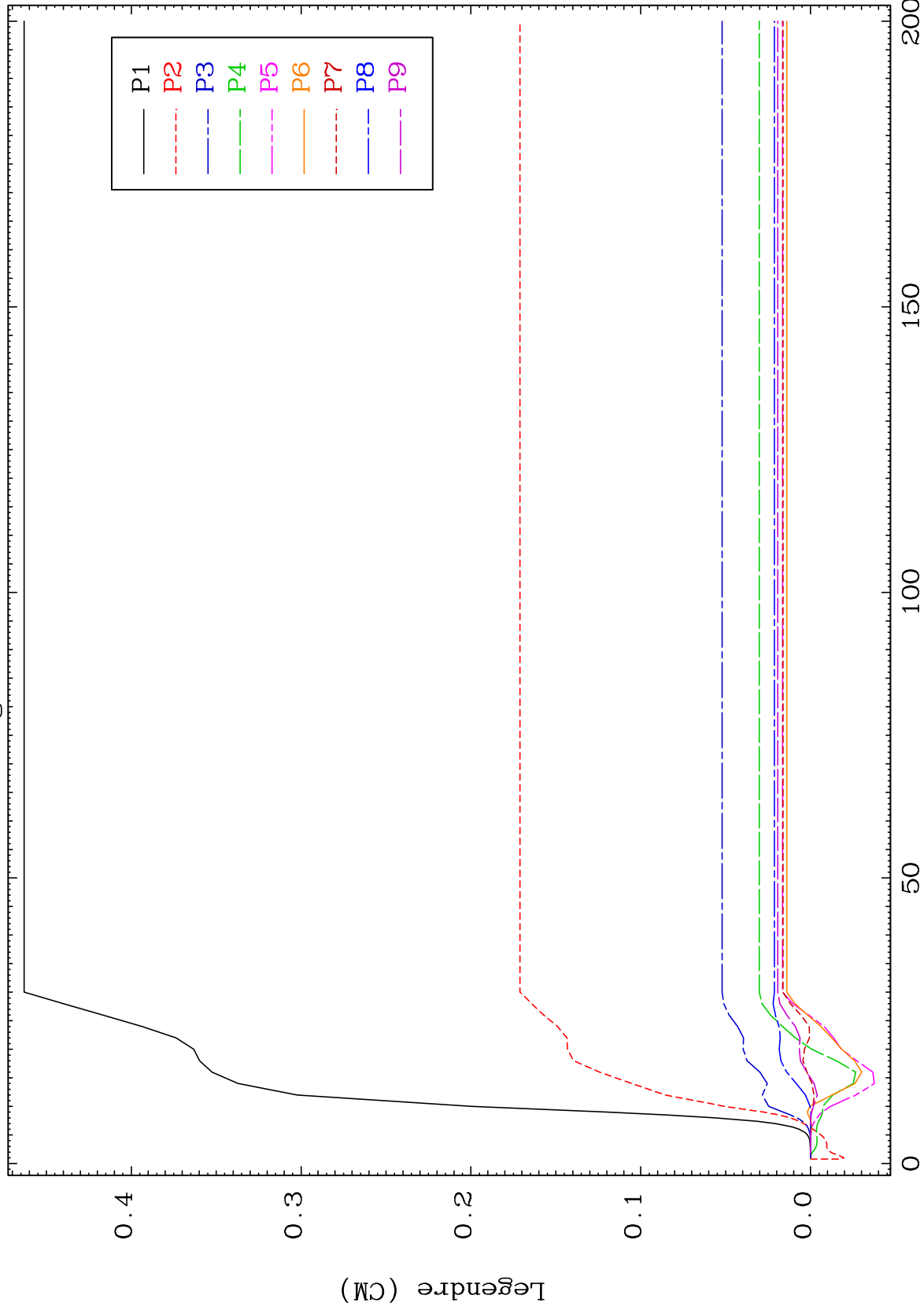
41-Nb-89

MAT 4113

MT= 53 (n,n') Level

41-Nb-89

Legendre Coefficients



27

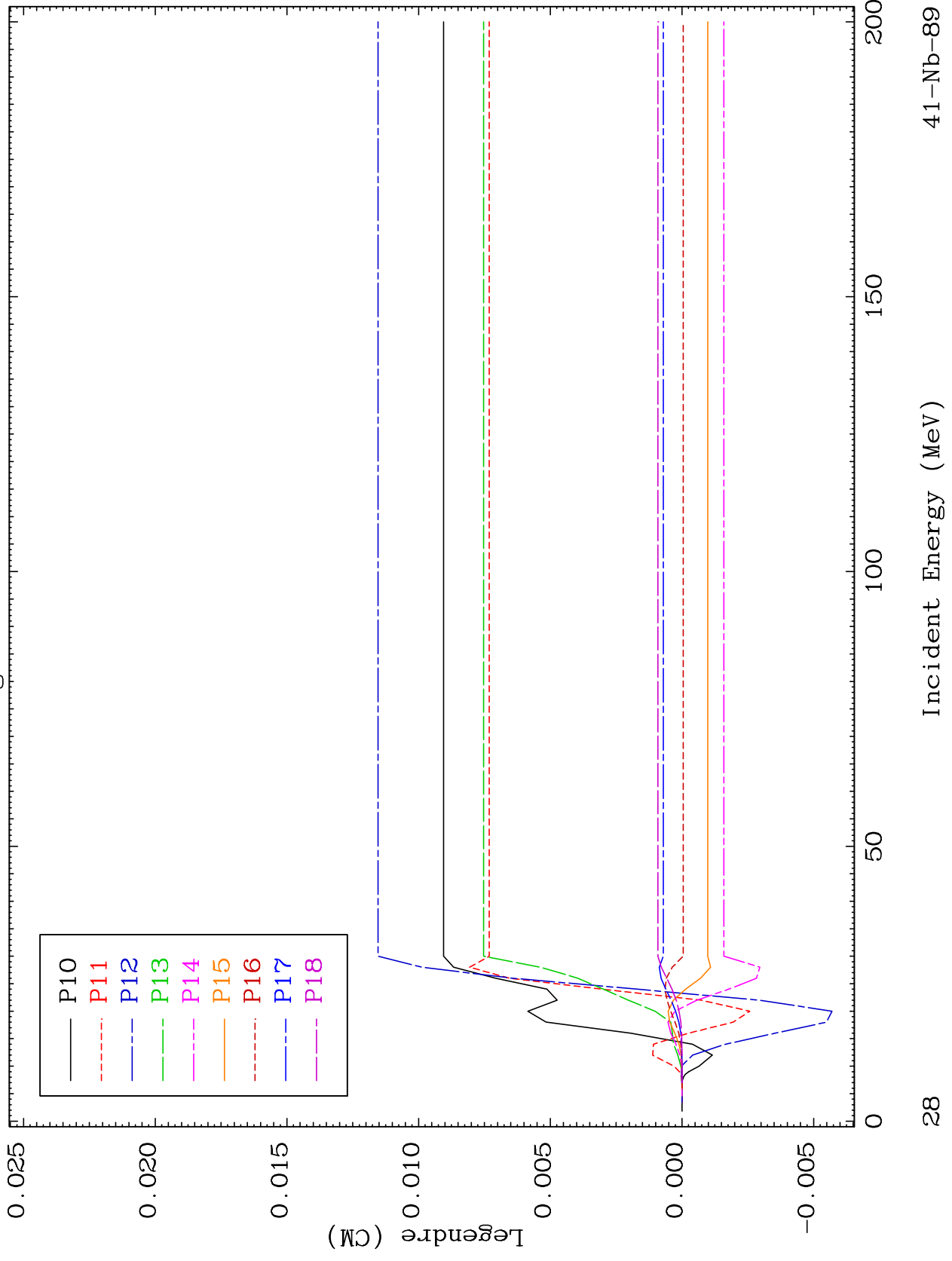
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



28

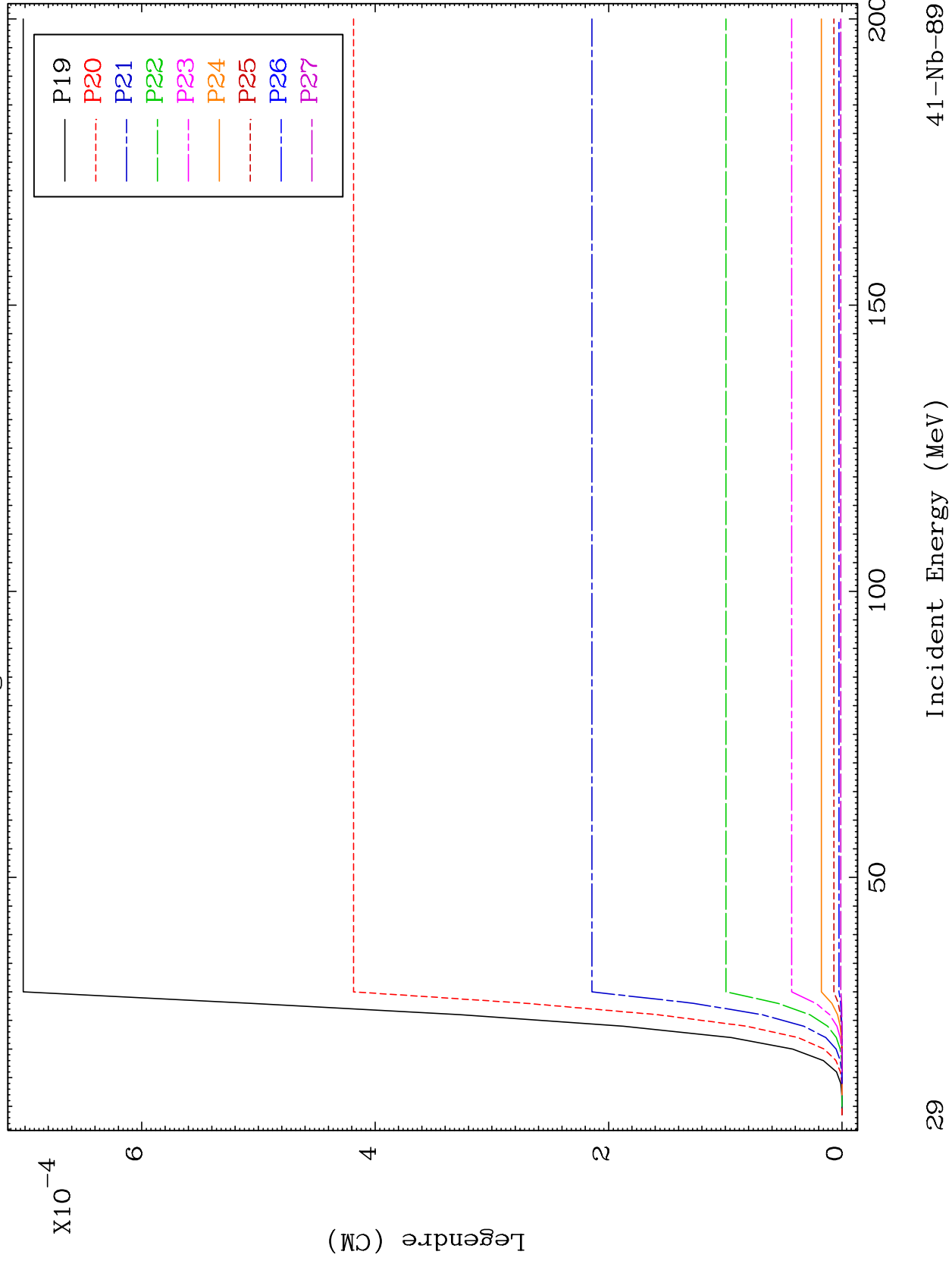
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



29

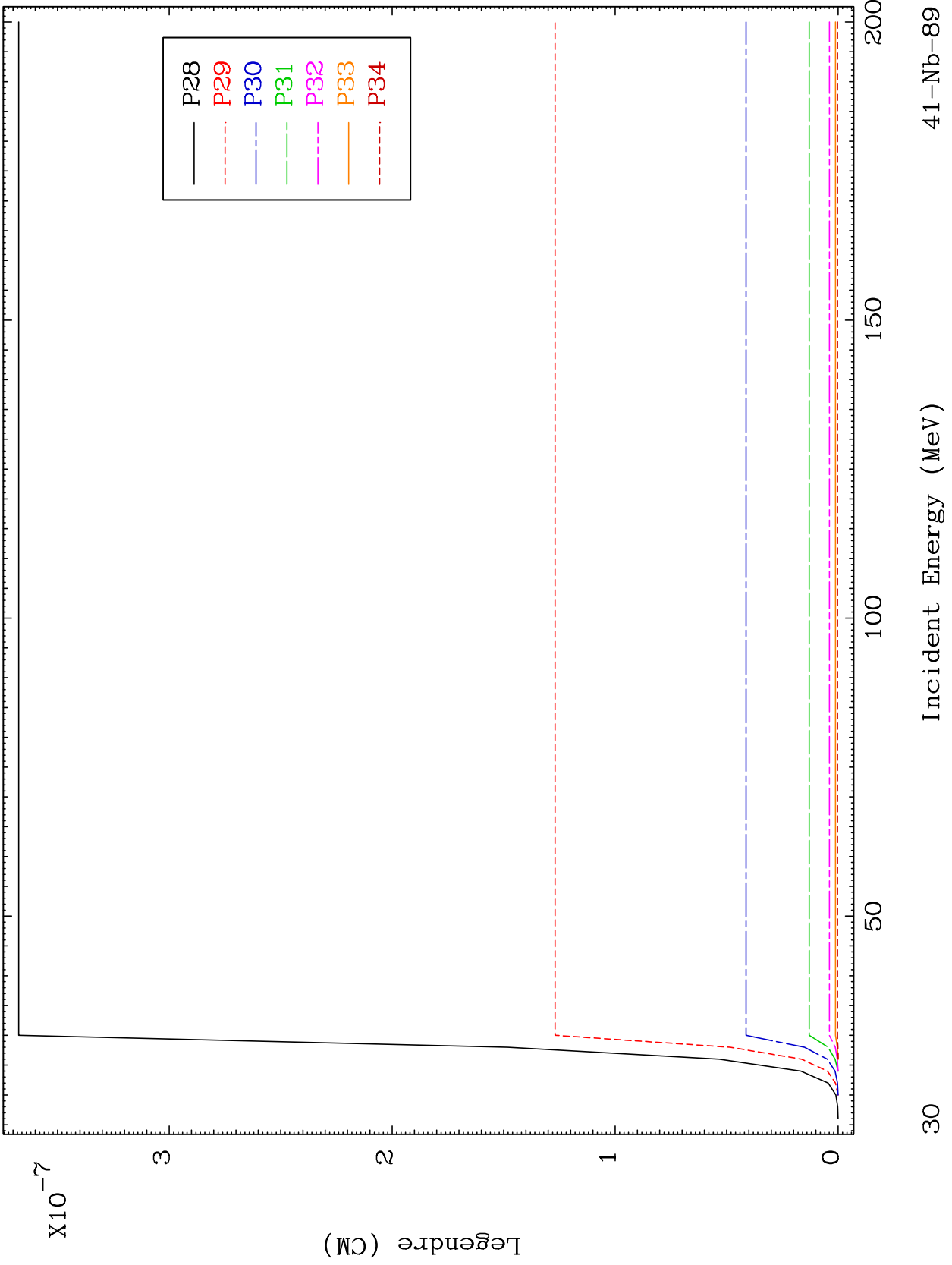
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

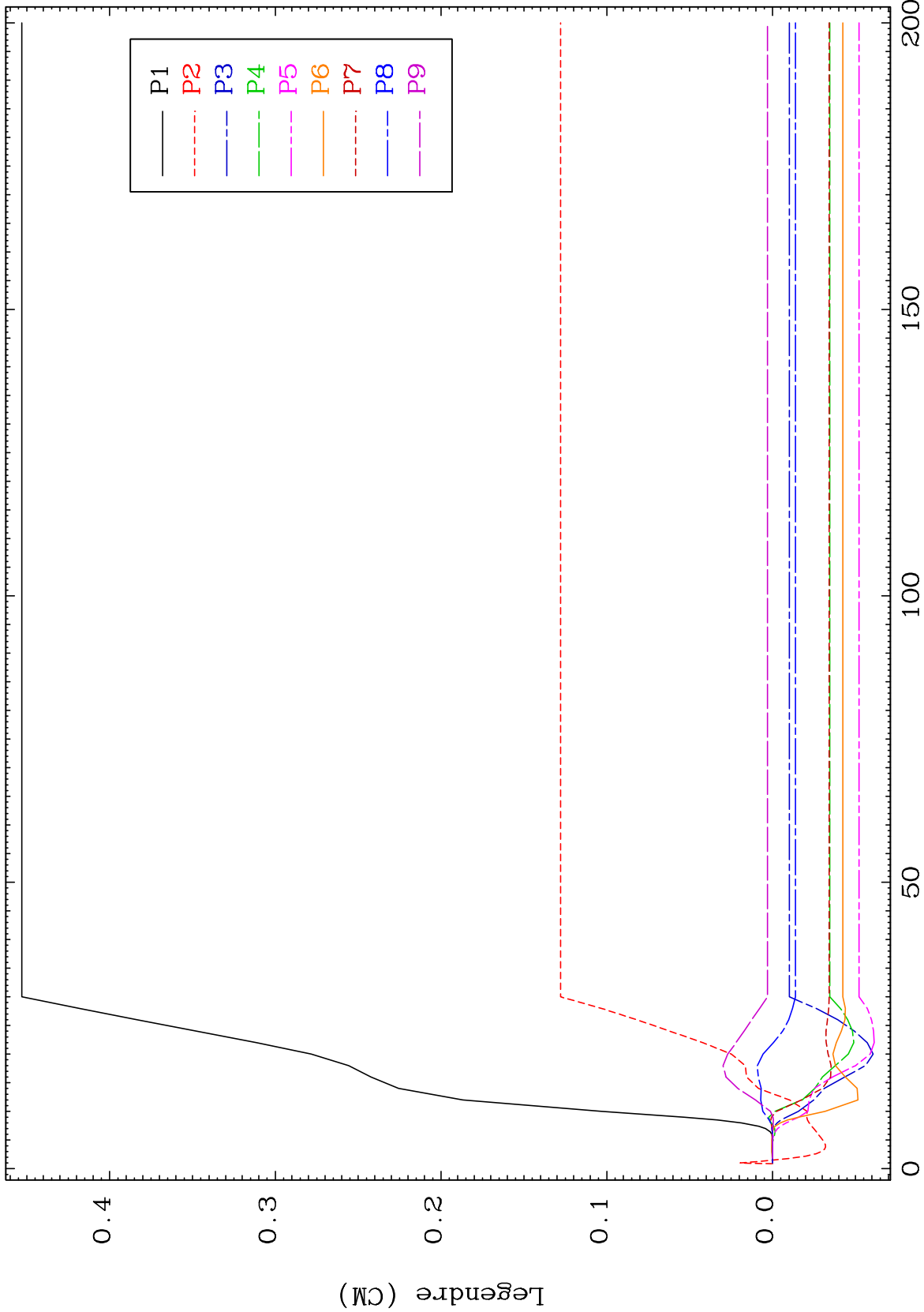
41-Nb-89



MAT 4113

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

41-Nb-89



31

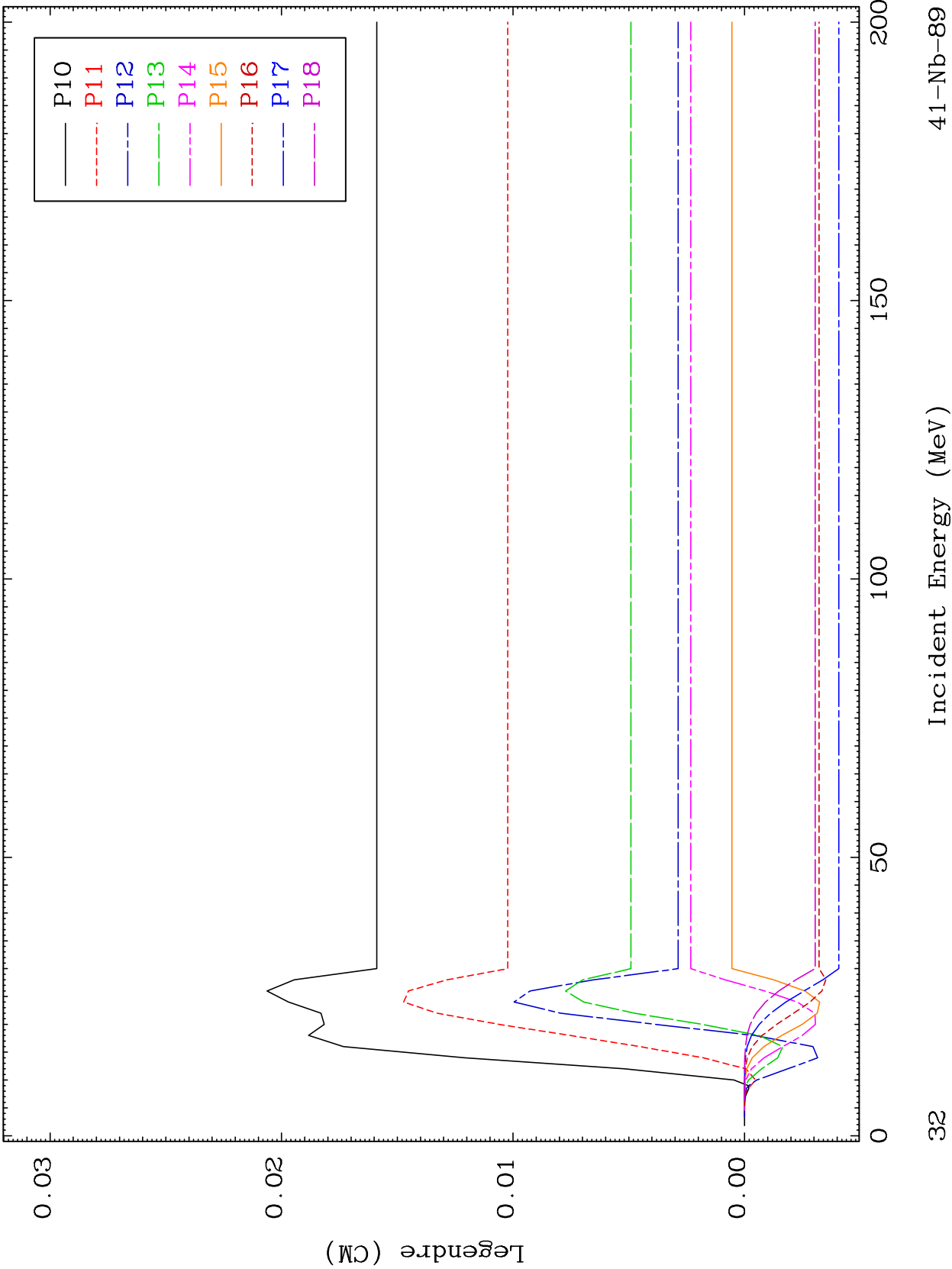
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



41-Nb-89

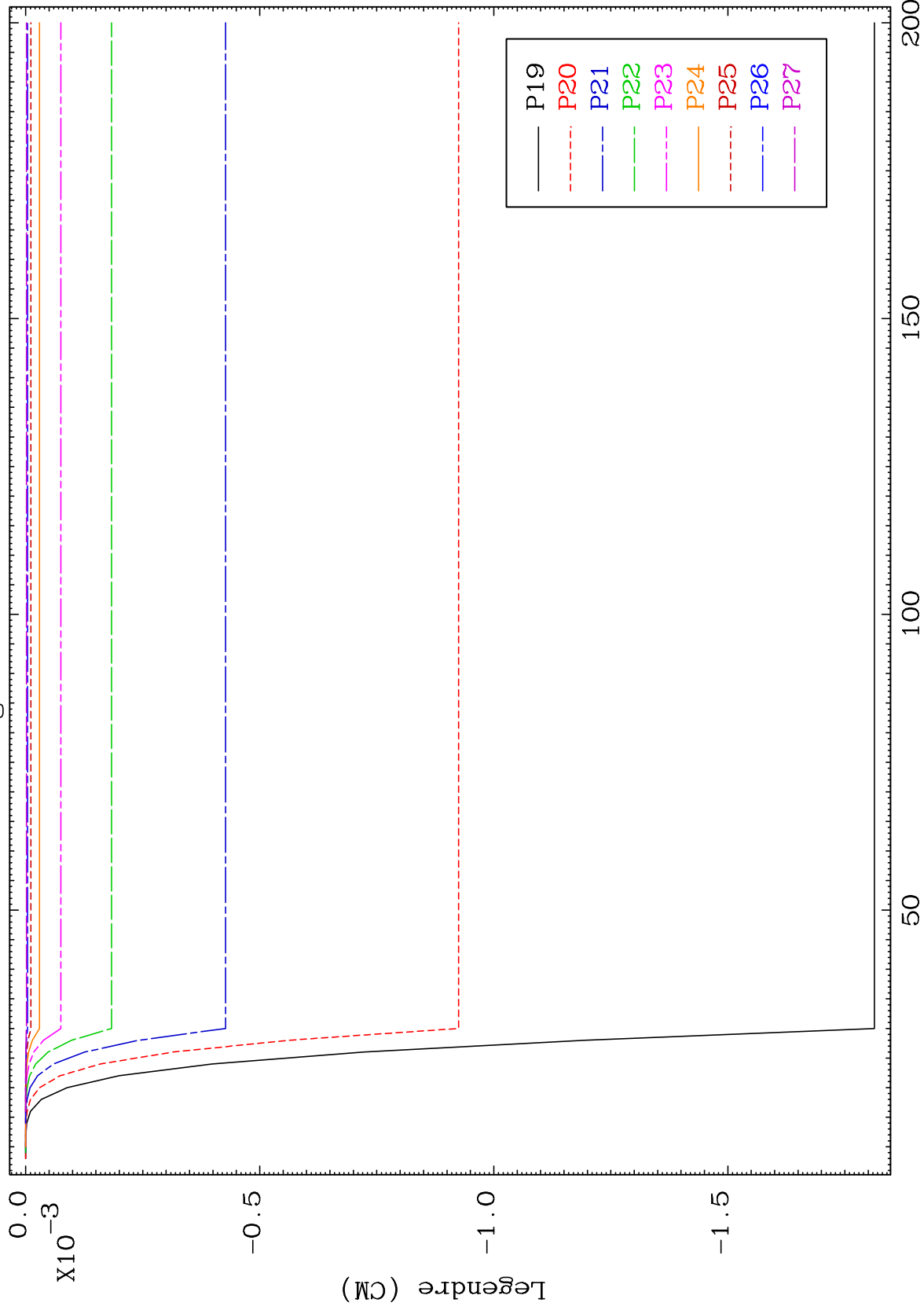
Incident Energy (MeV)

32

MAT 4113

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

41-Nb-89



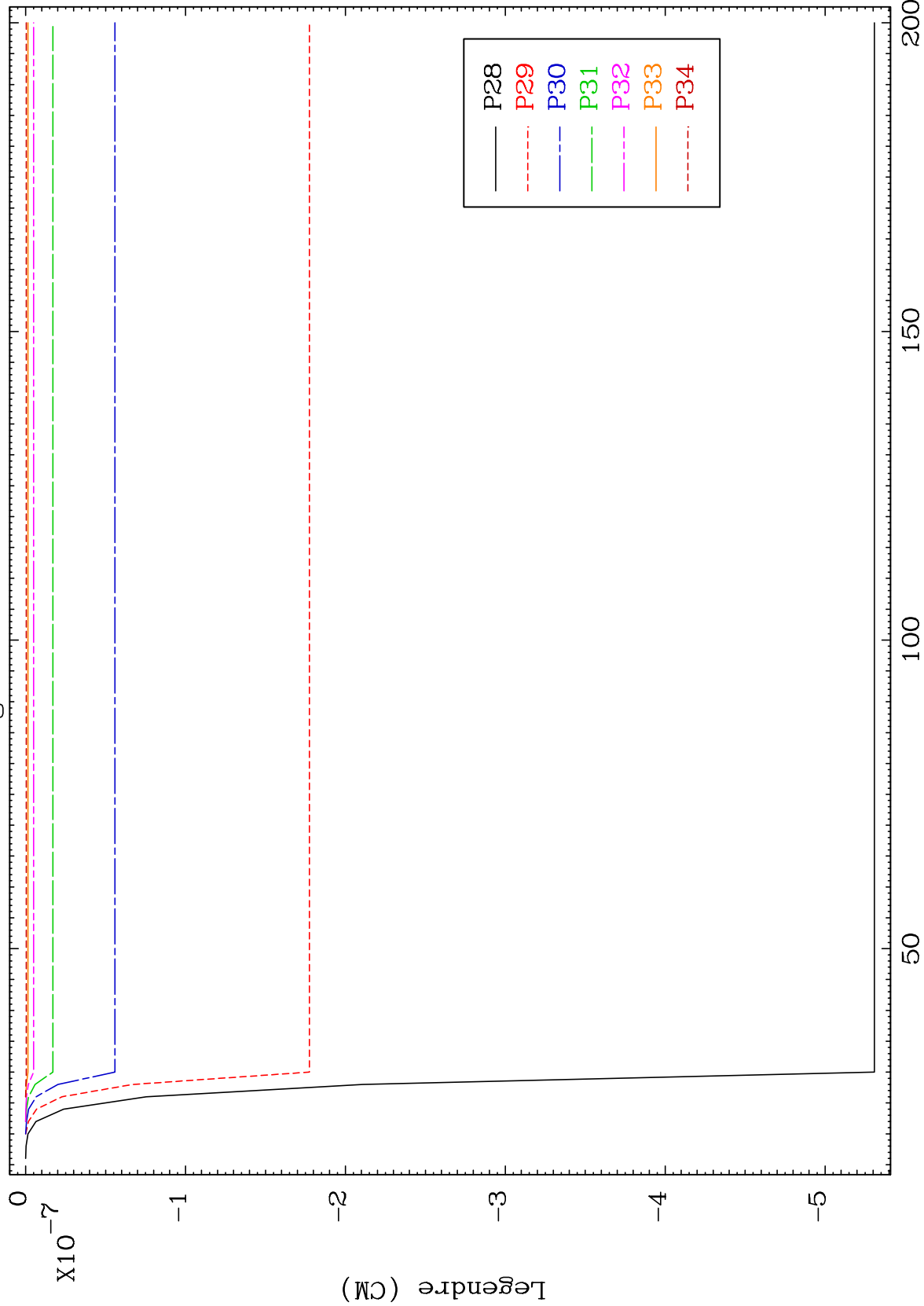
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MAT 4113

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

41-Nb-89



34

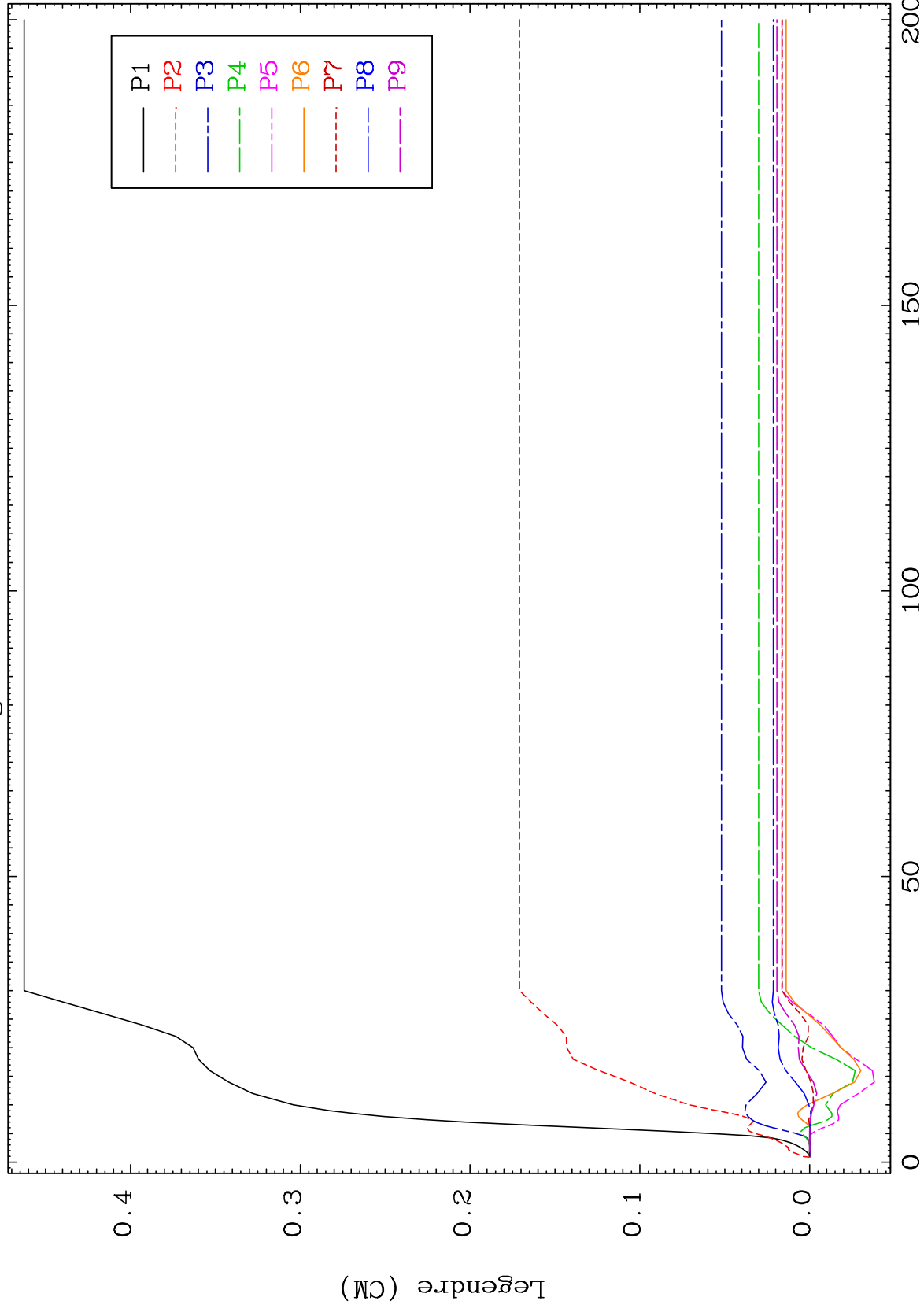
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



35

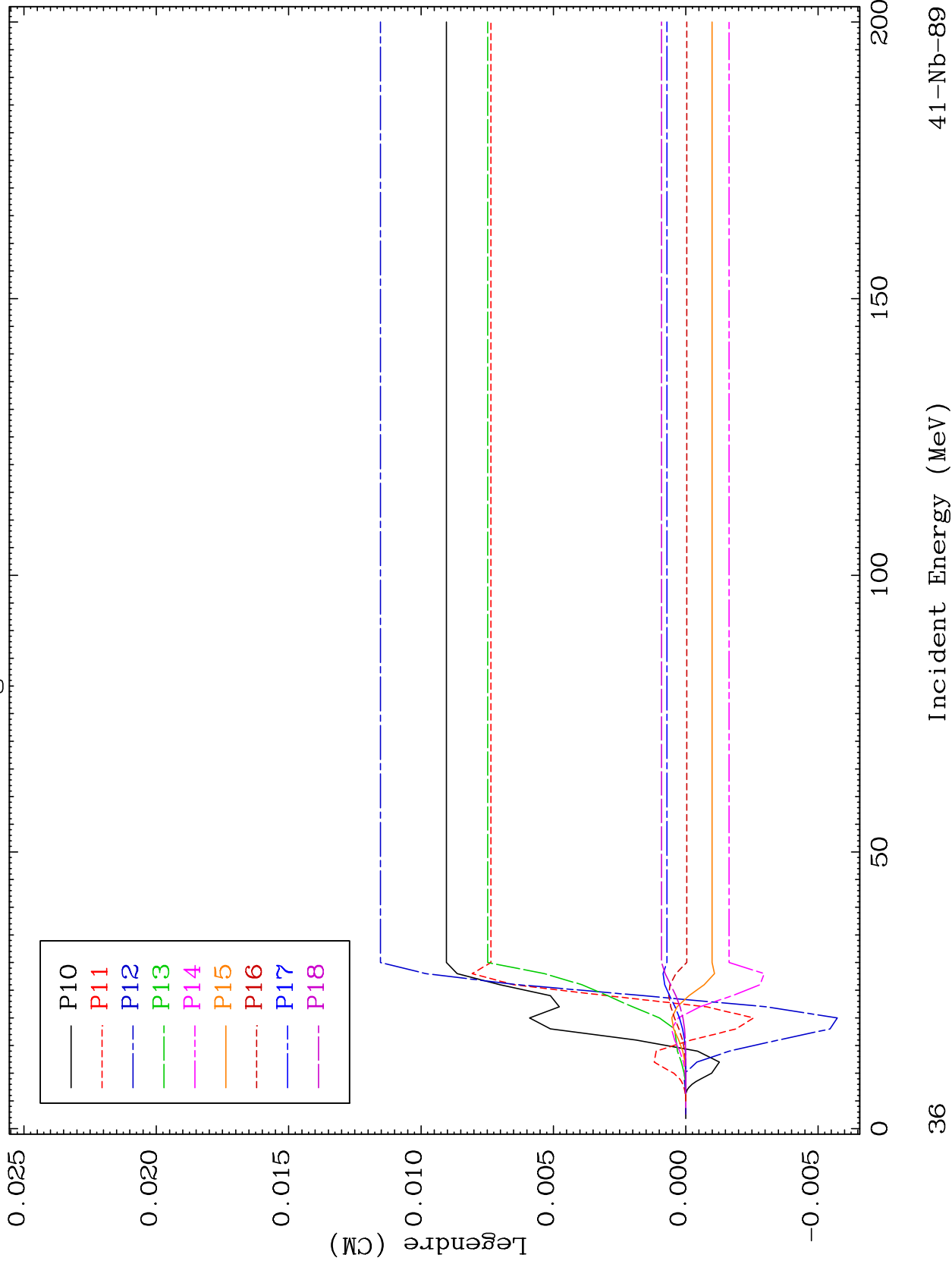
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



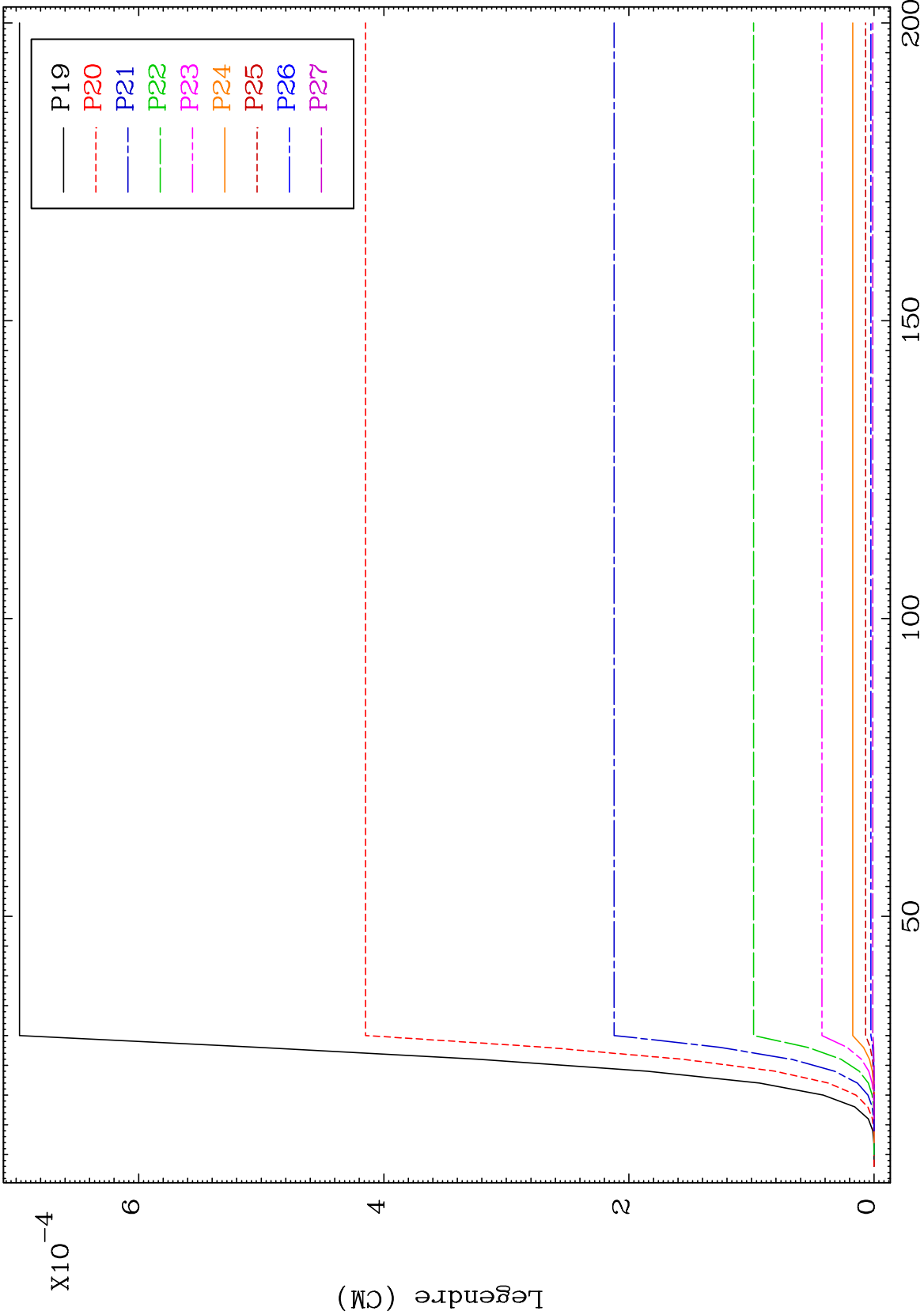
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41-Nb-89

MAT 4113

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

41-Nb-89



37

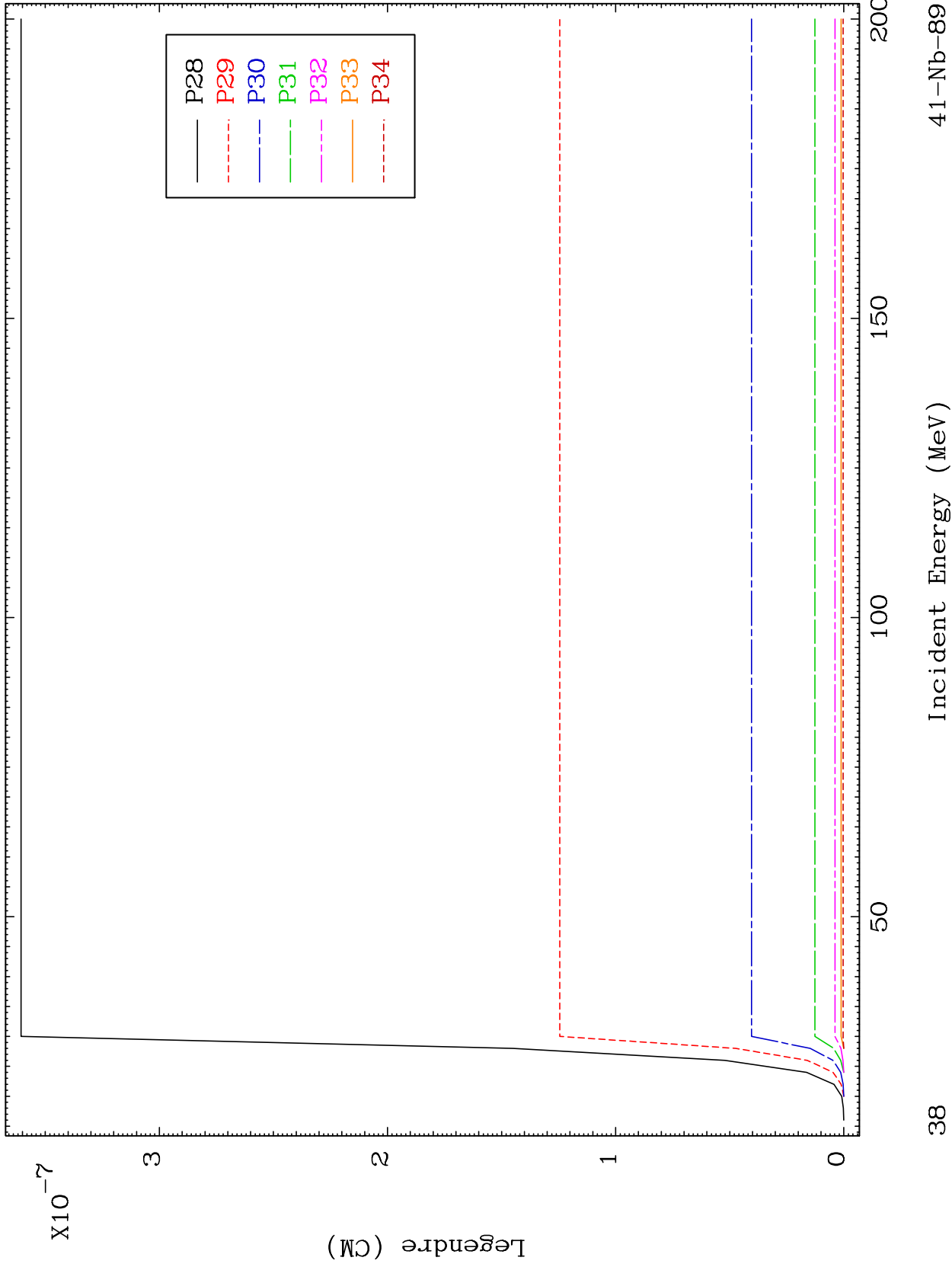
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



38

Incident Energy (MeV)

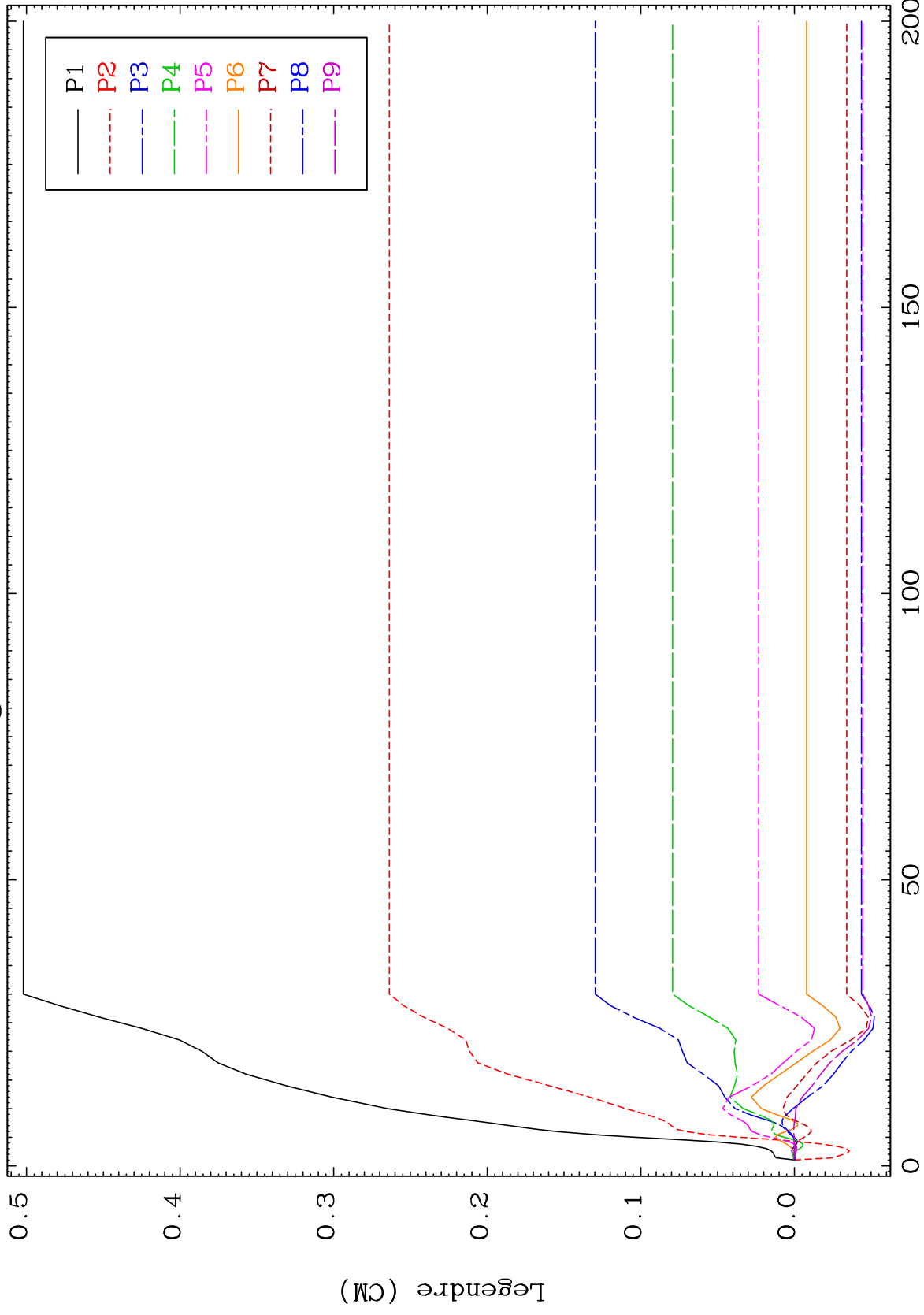
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MAT 4113

MT= 56 (n,n') Level

41-Nb-89

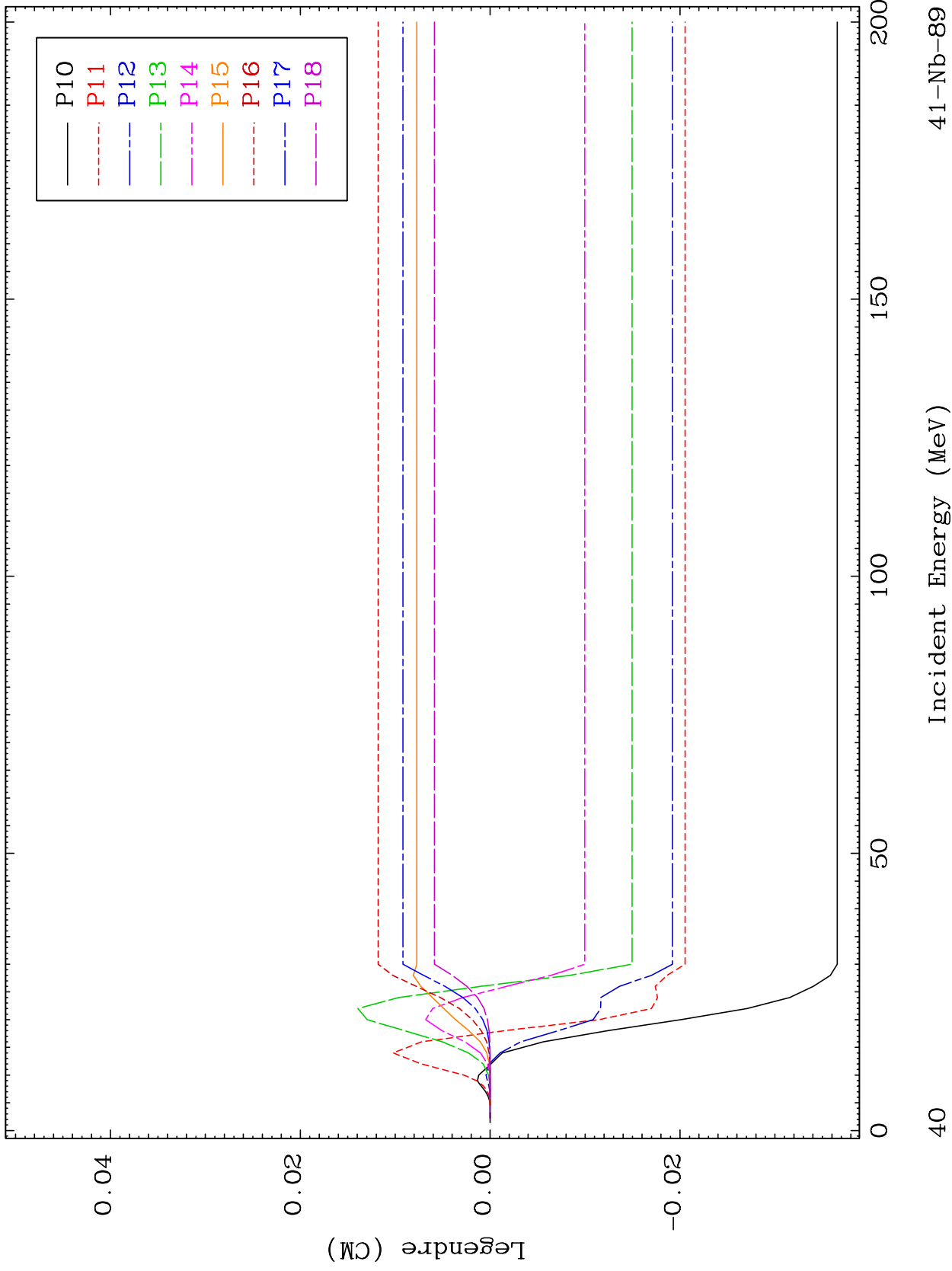
Legendre Coefficients



MAT 4113

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

41-Nb-89



40

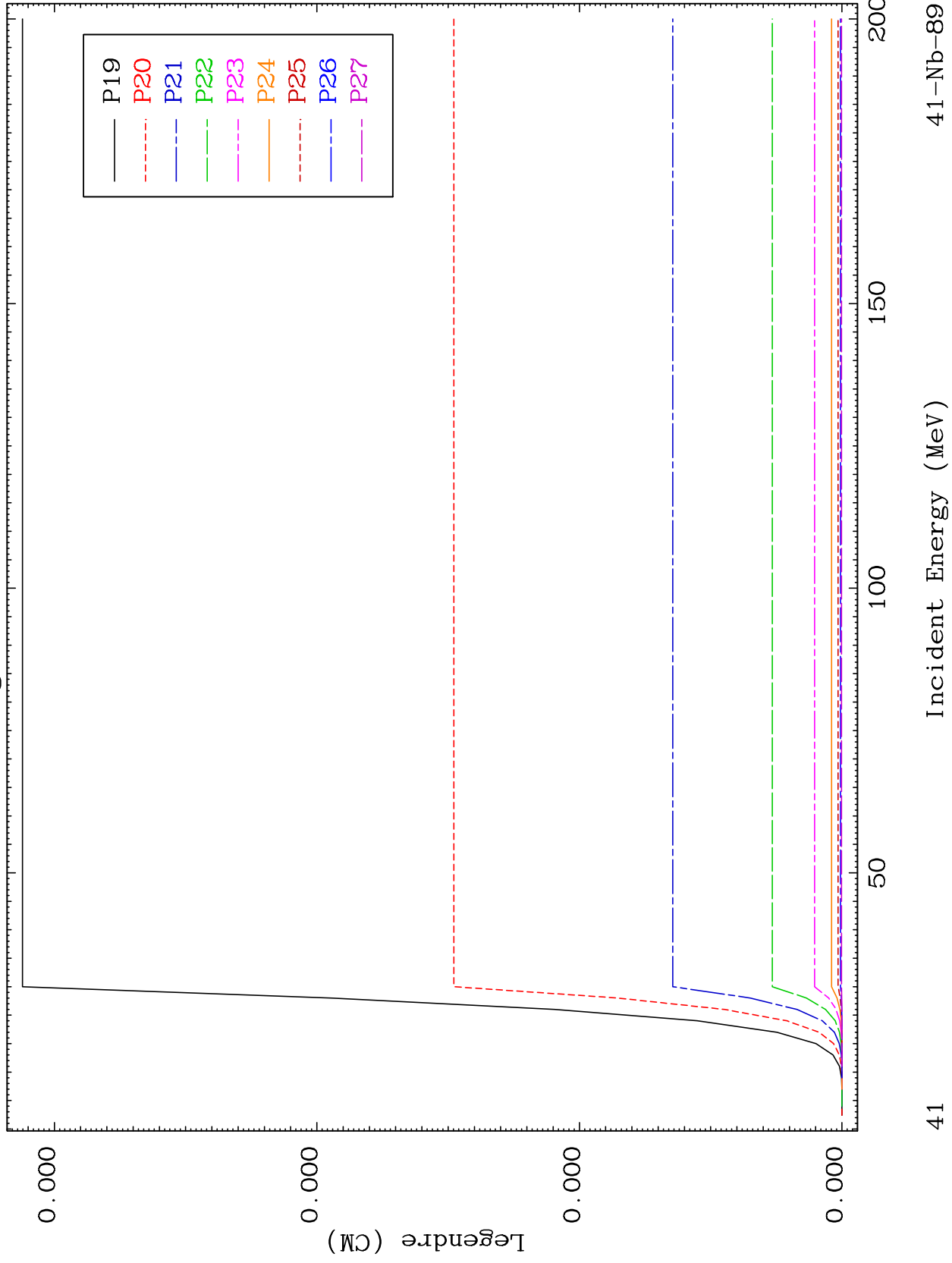
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89

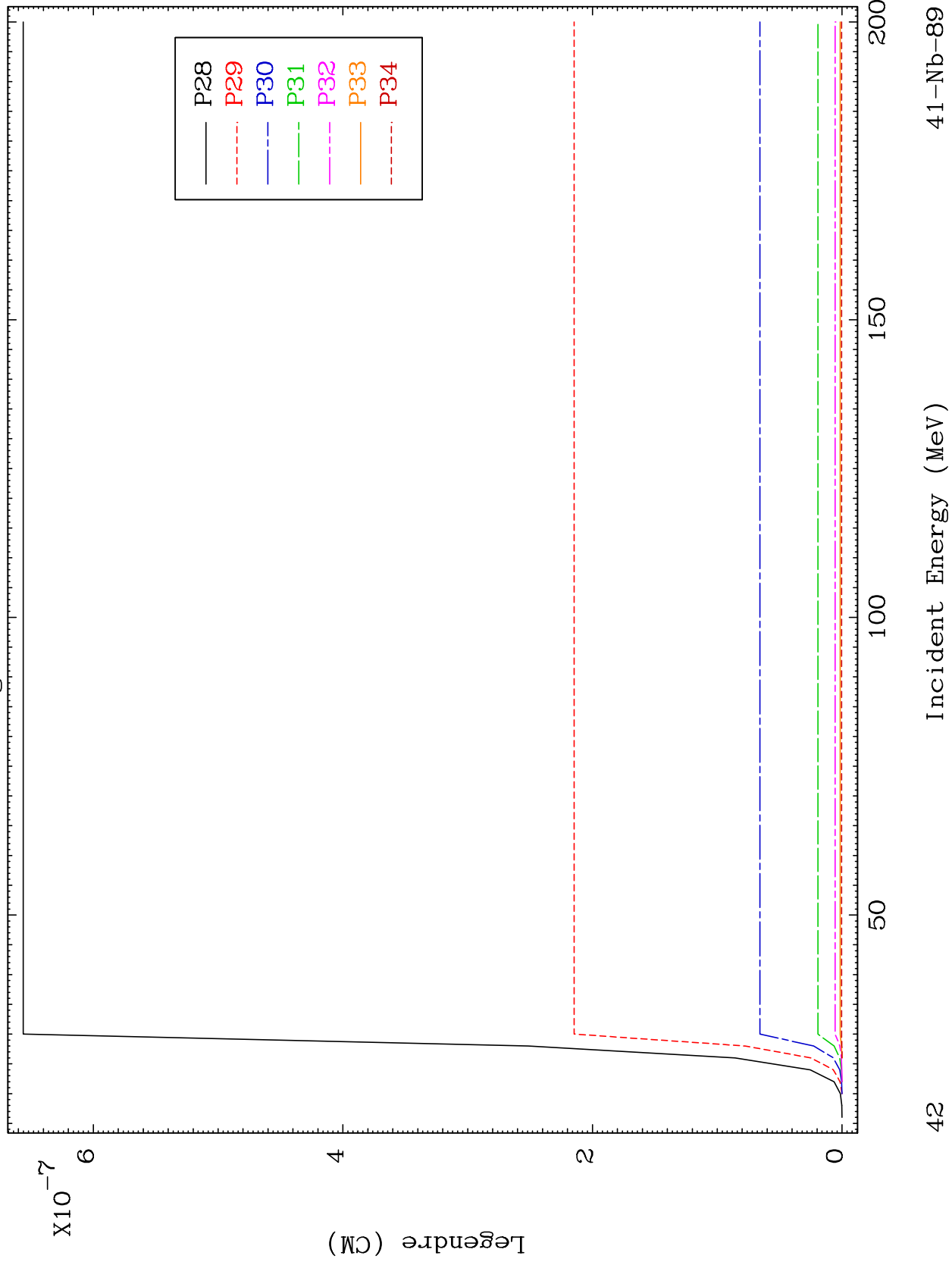


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MAT 4113

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

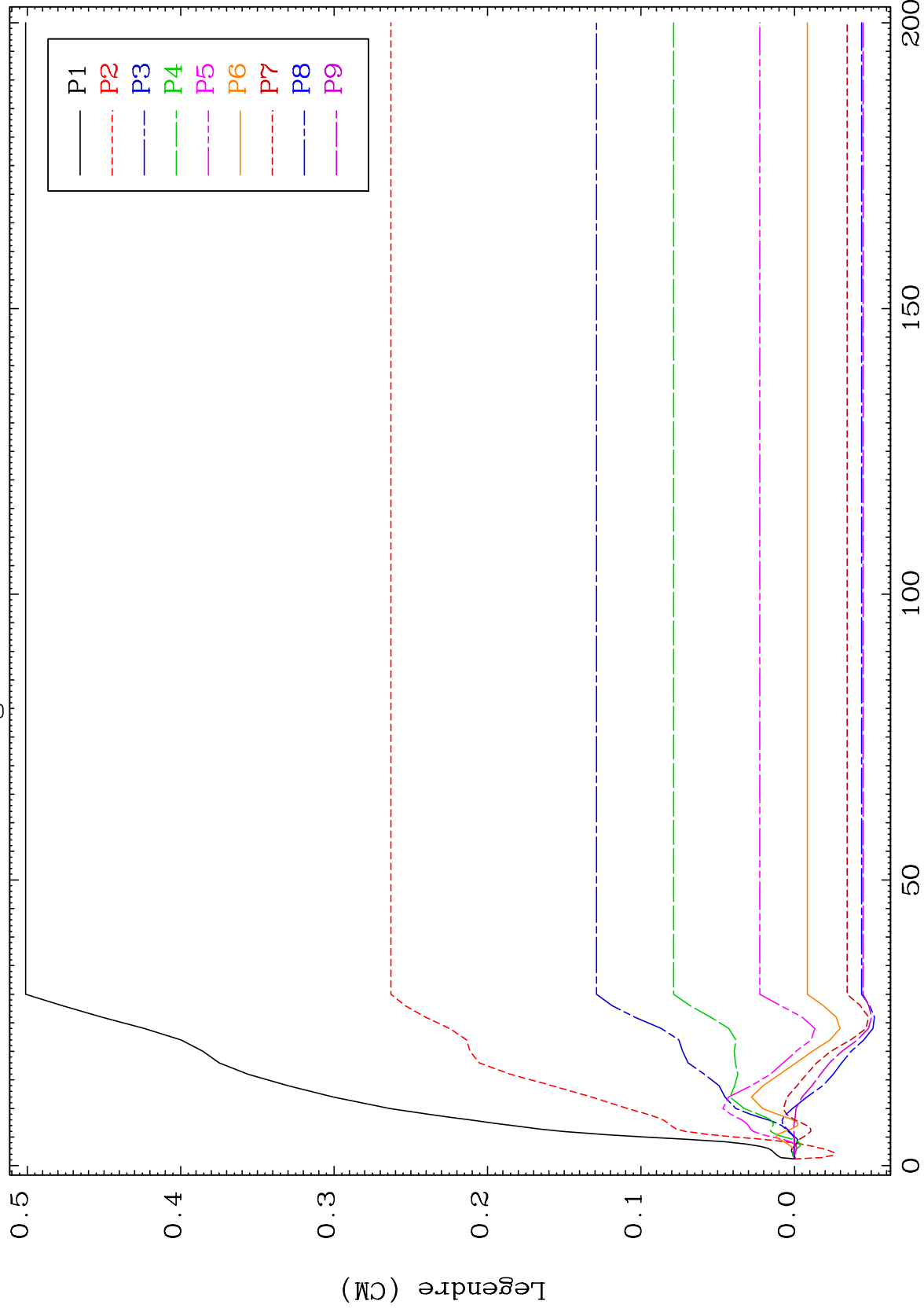
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MAT 4113

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

41-Nb-89



43

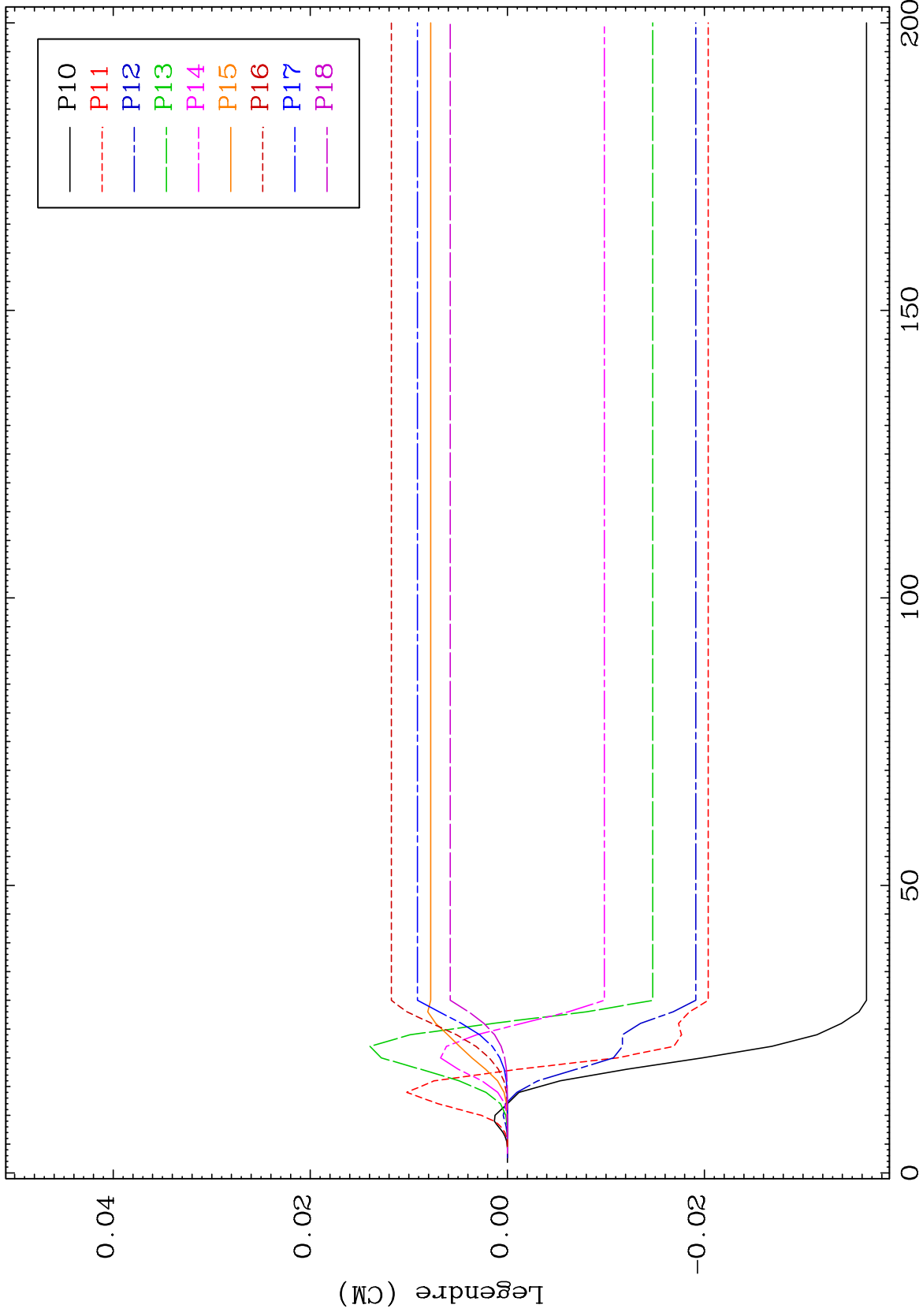
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



44

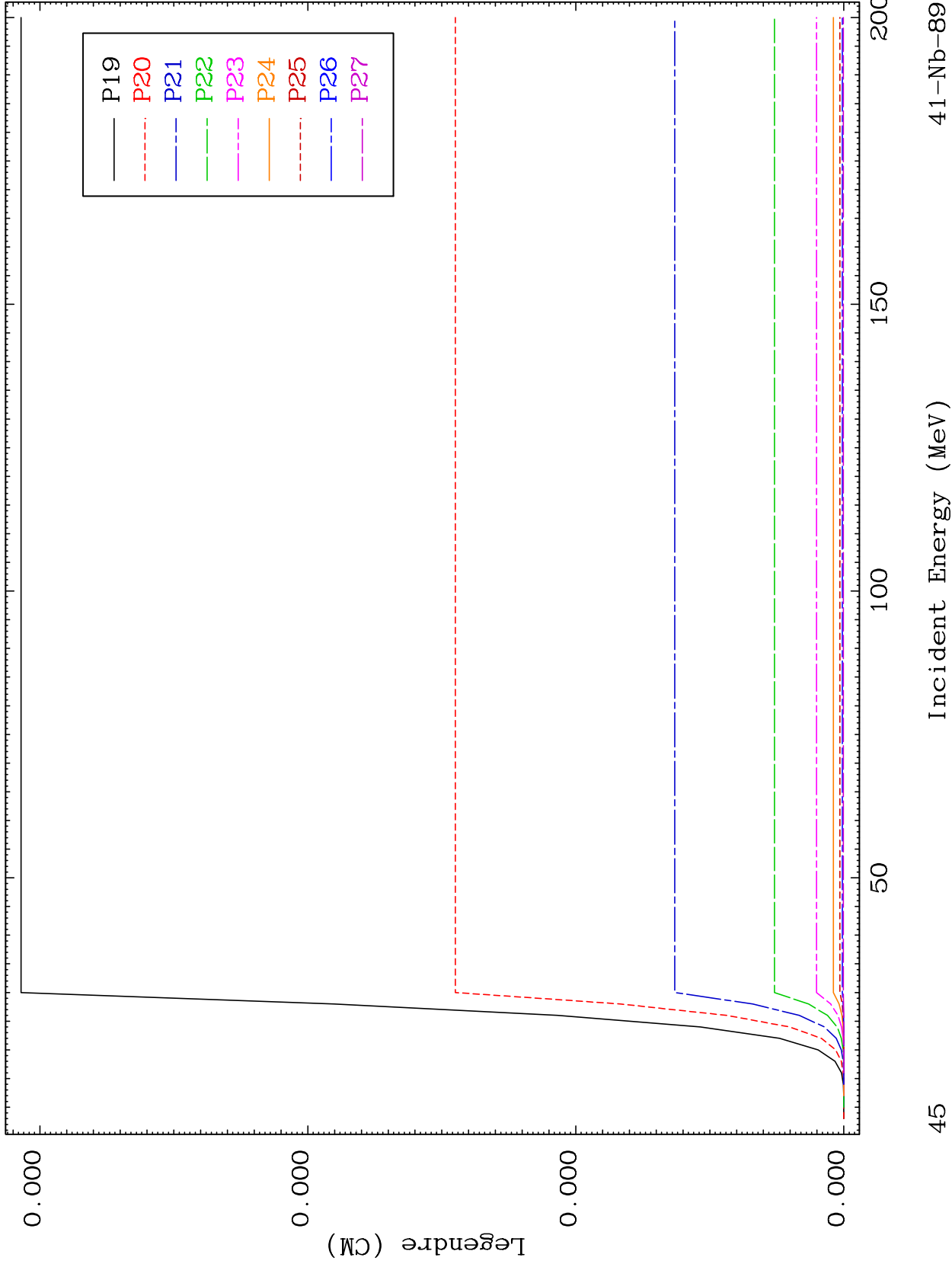
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

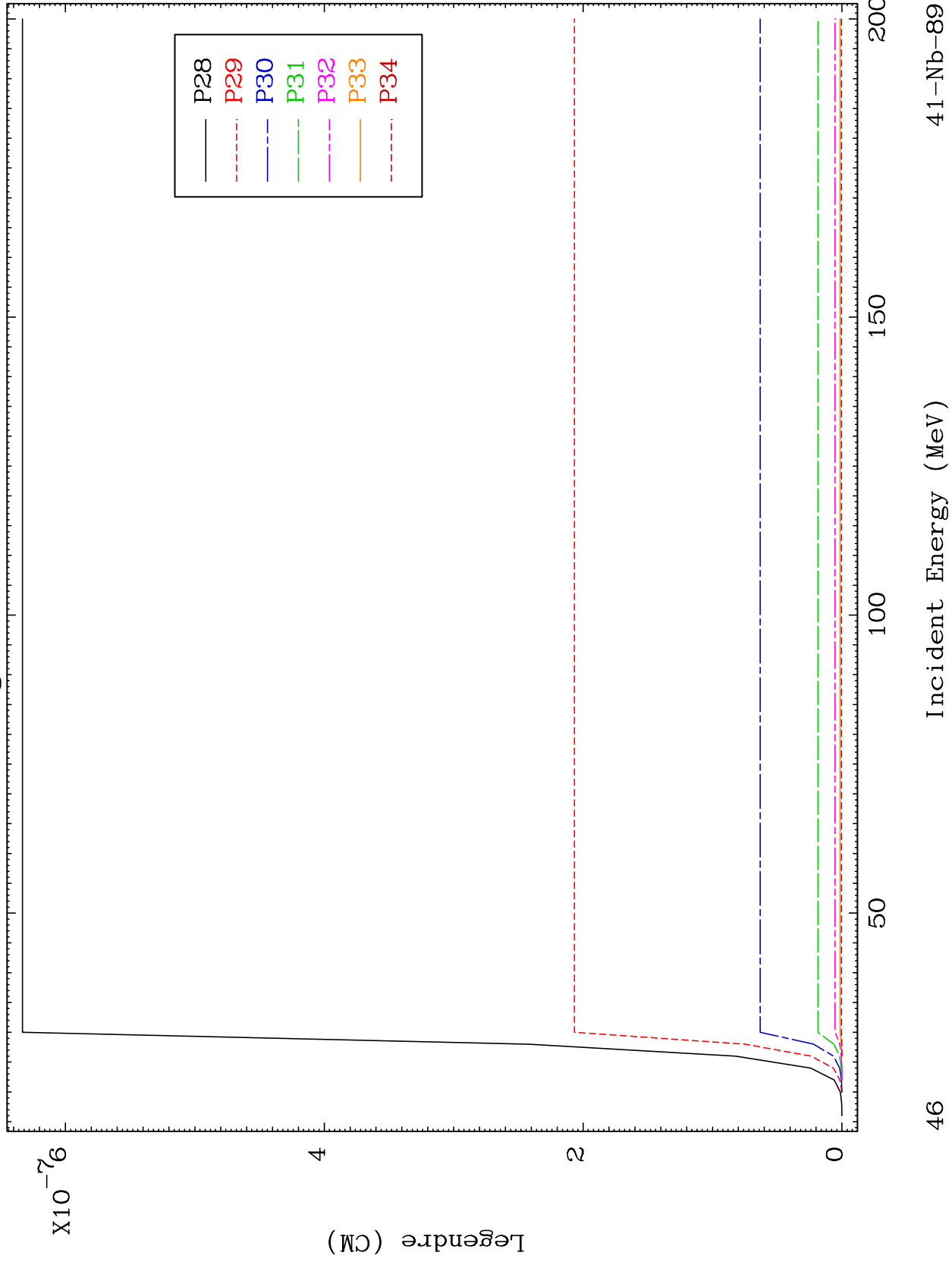
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MAT 4113

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

41-Nb-89

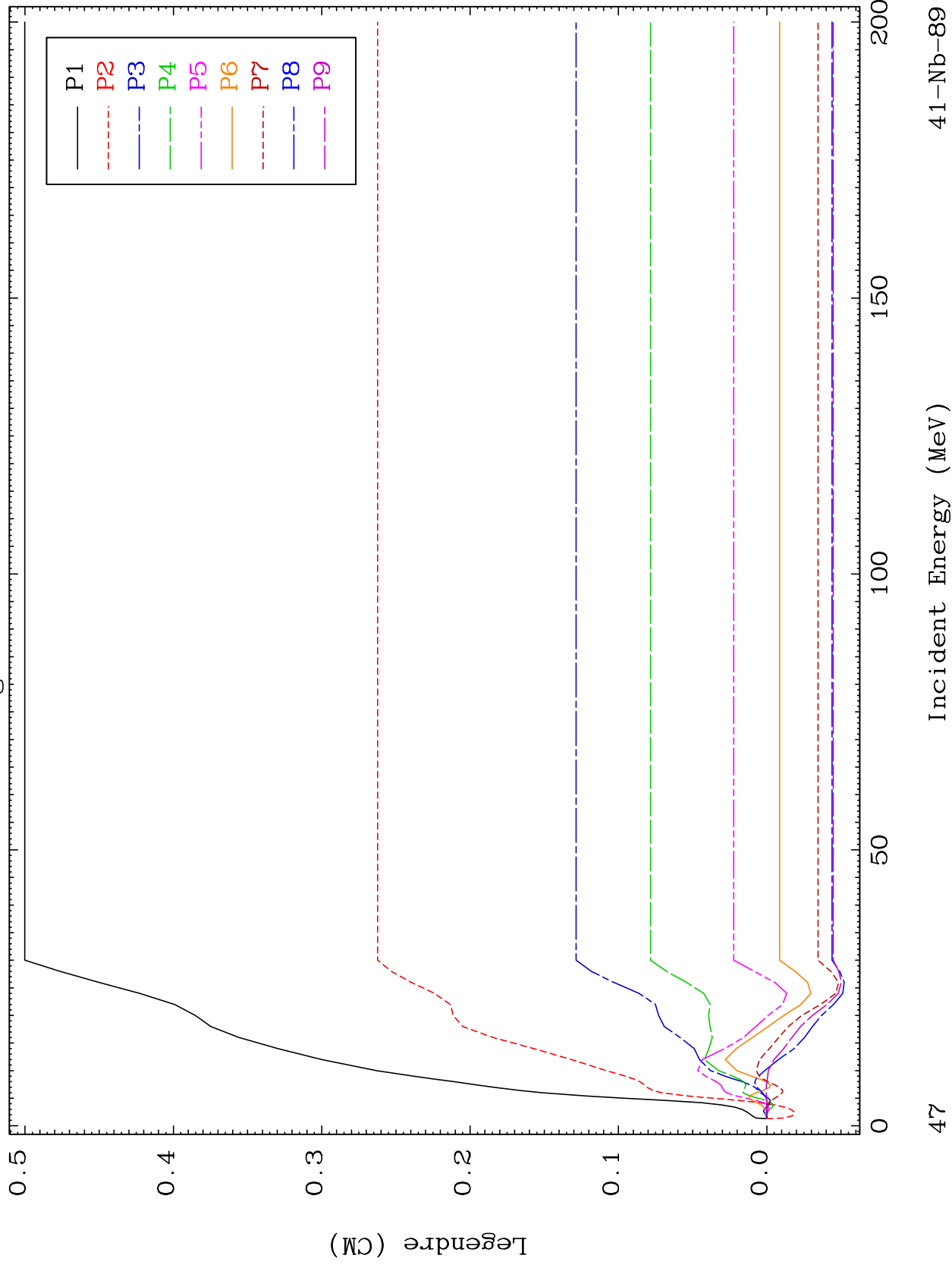


MAT 4113

MT= 58 (n,n') Level

41-Nb-89

Legendre Coefficients



47

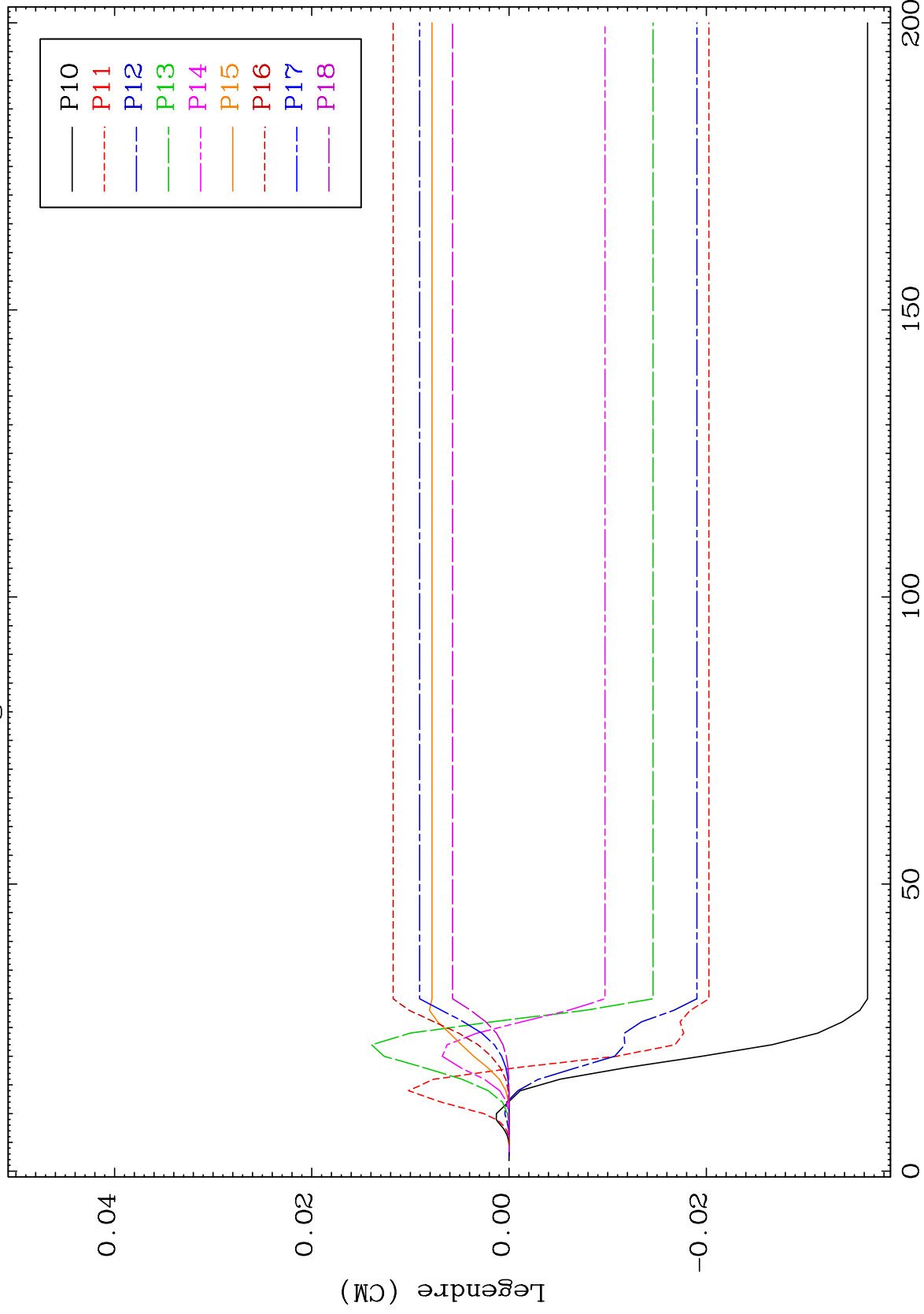
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



48

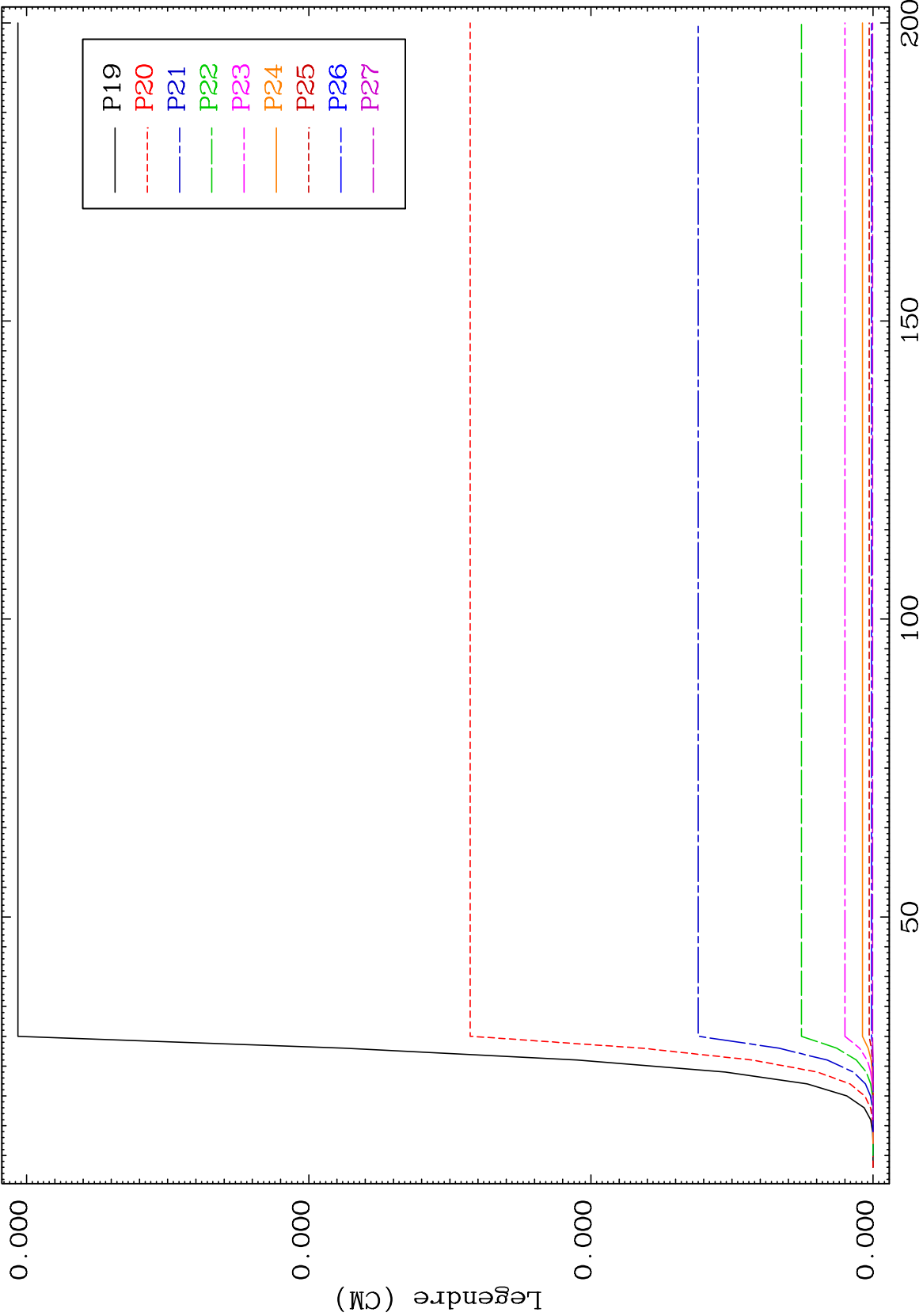
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



49

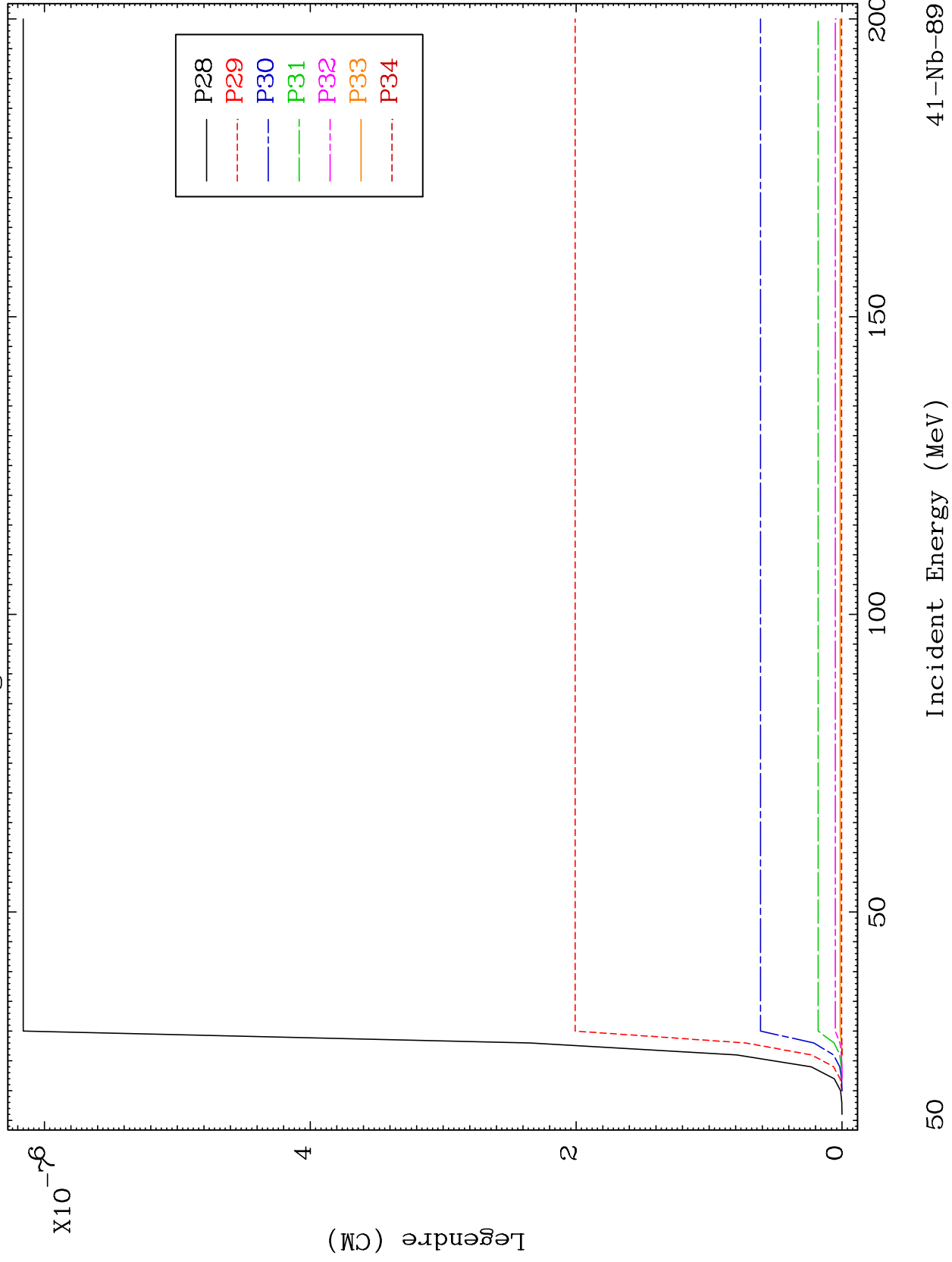
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

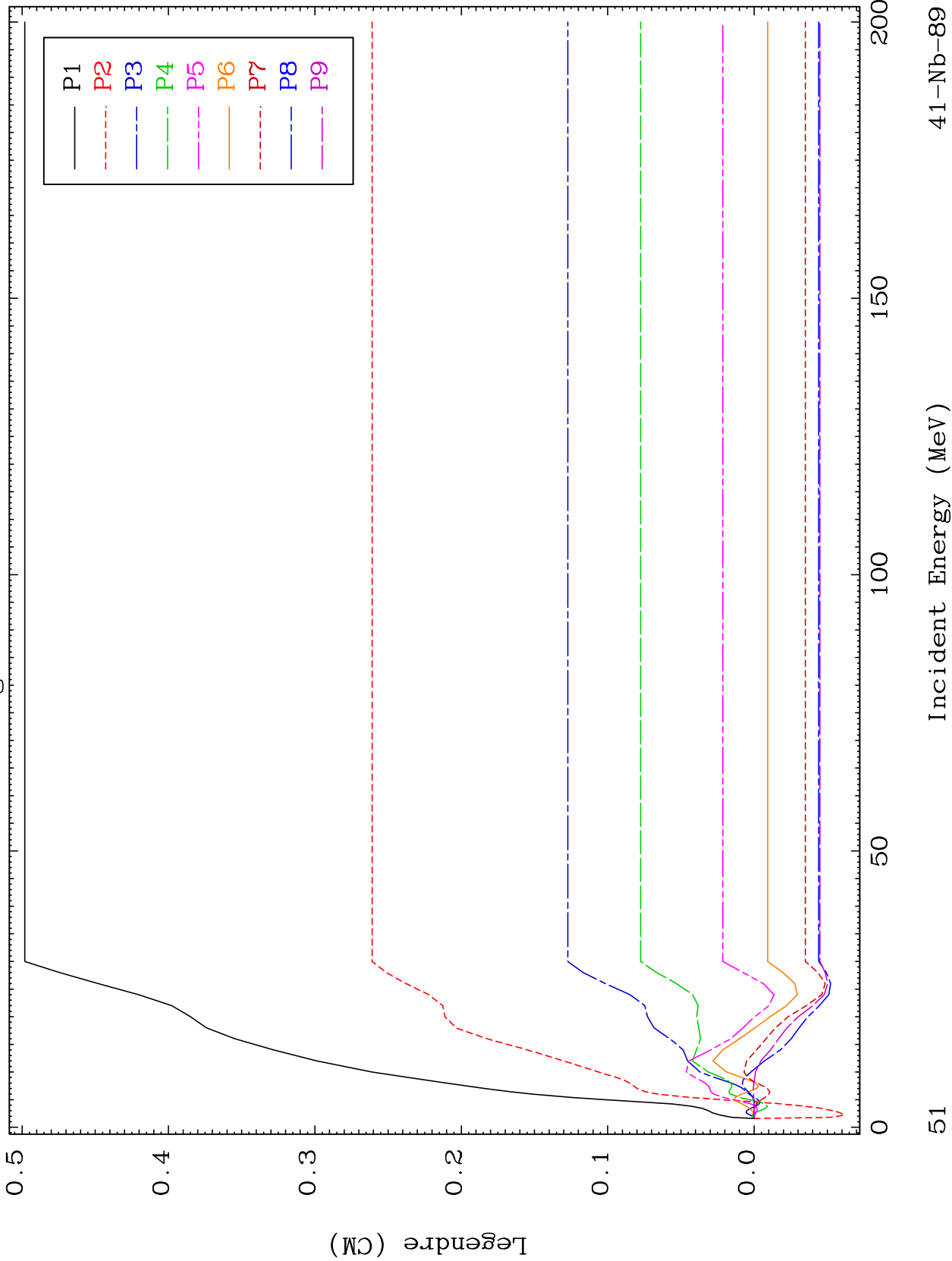
41-Nb-89



MAT 4113

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

41-Nb-89

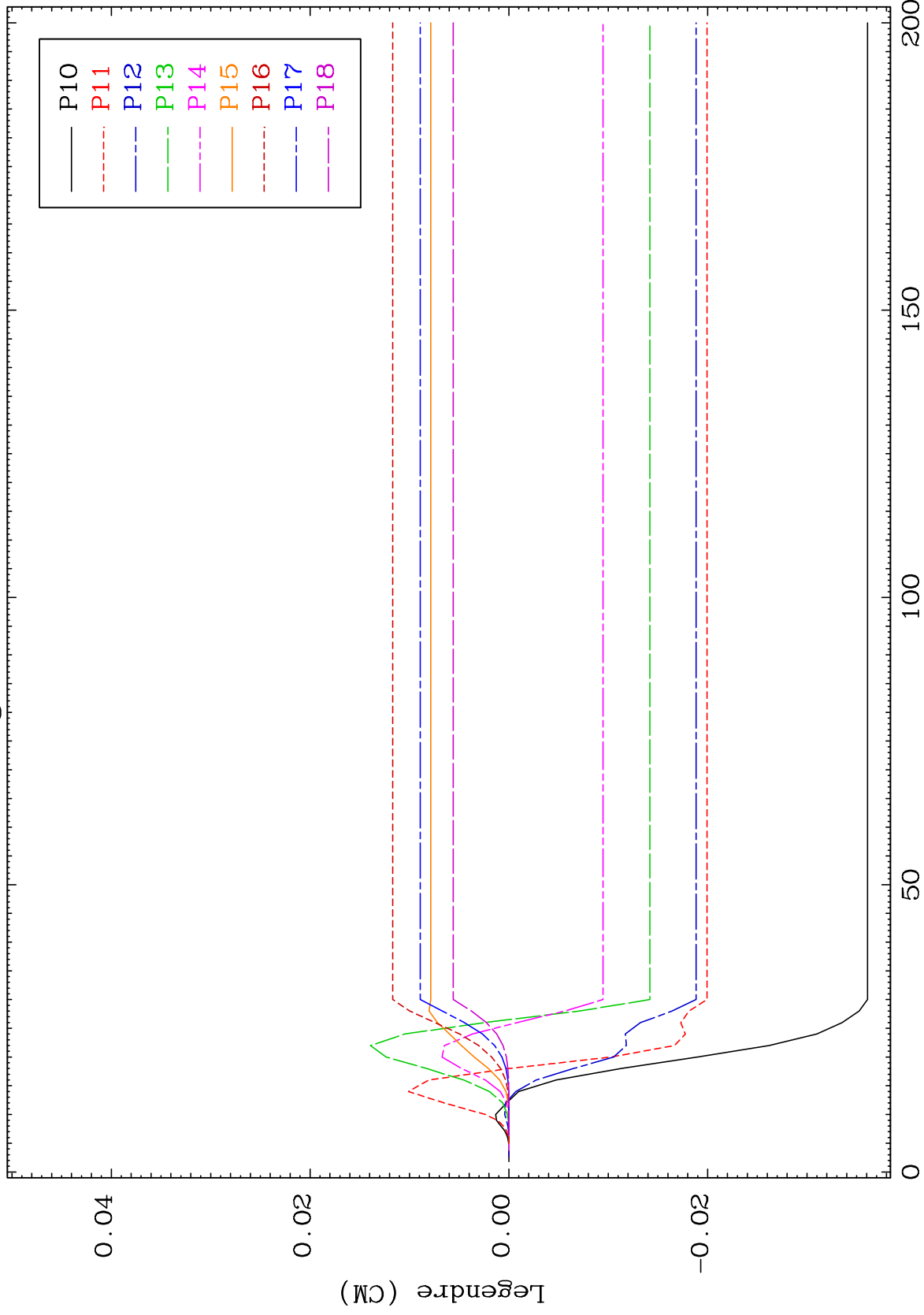


51

MAT 4113

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

41-Nb-89



52

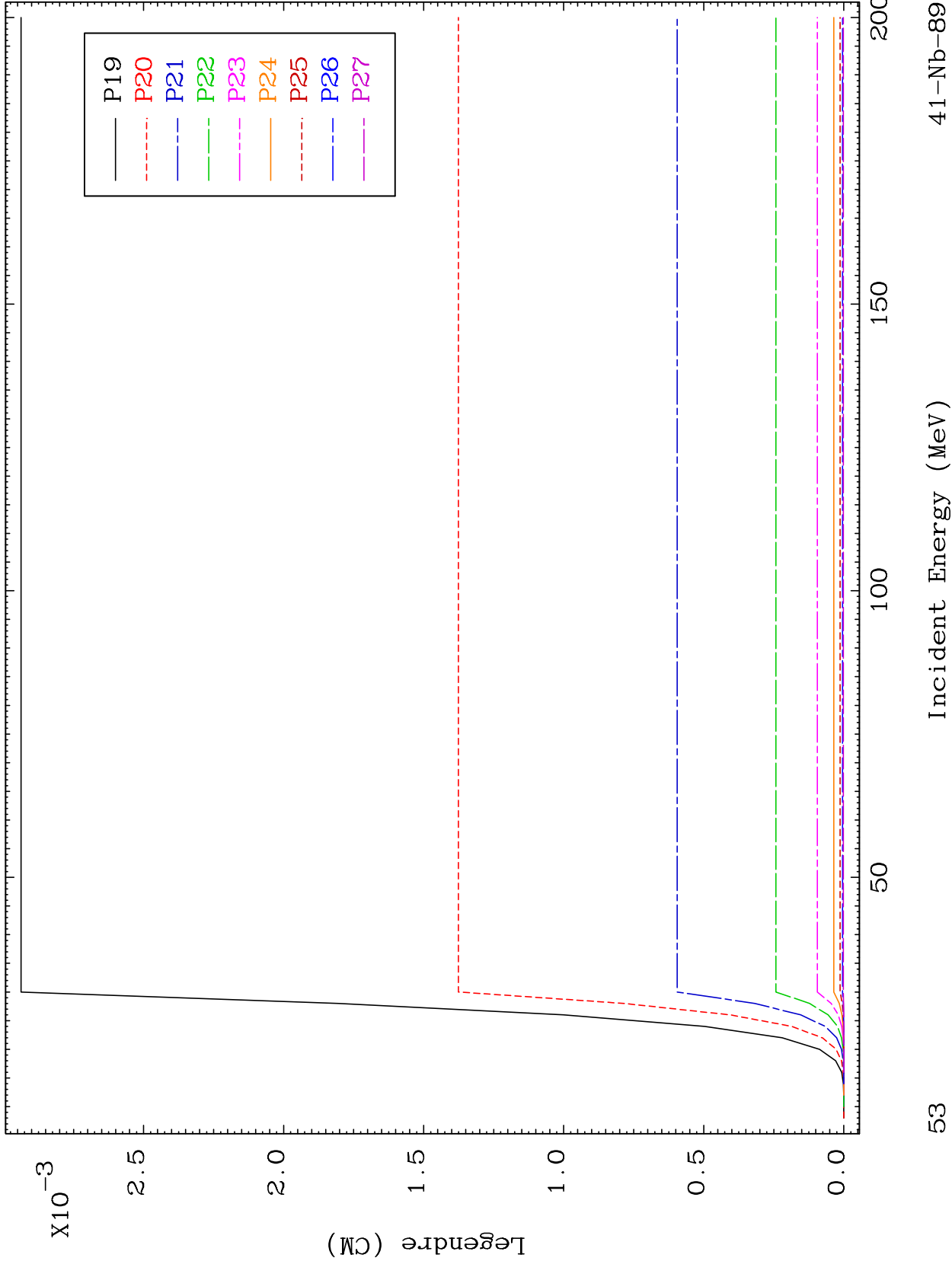
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



53

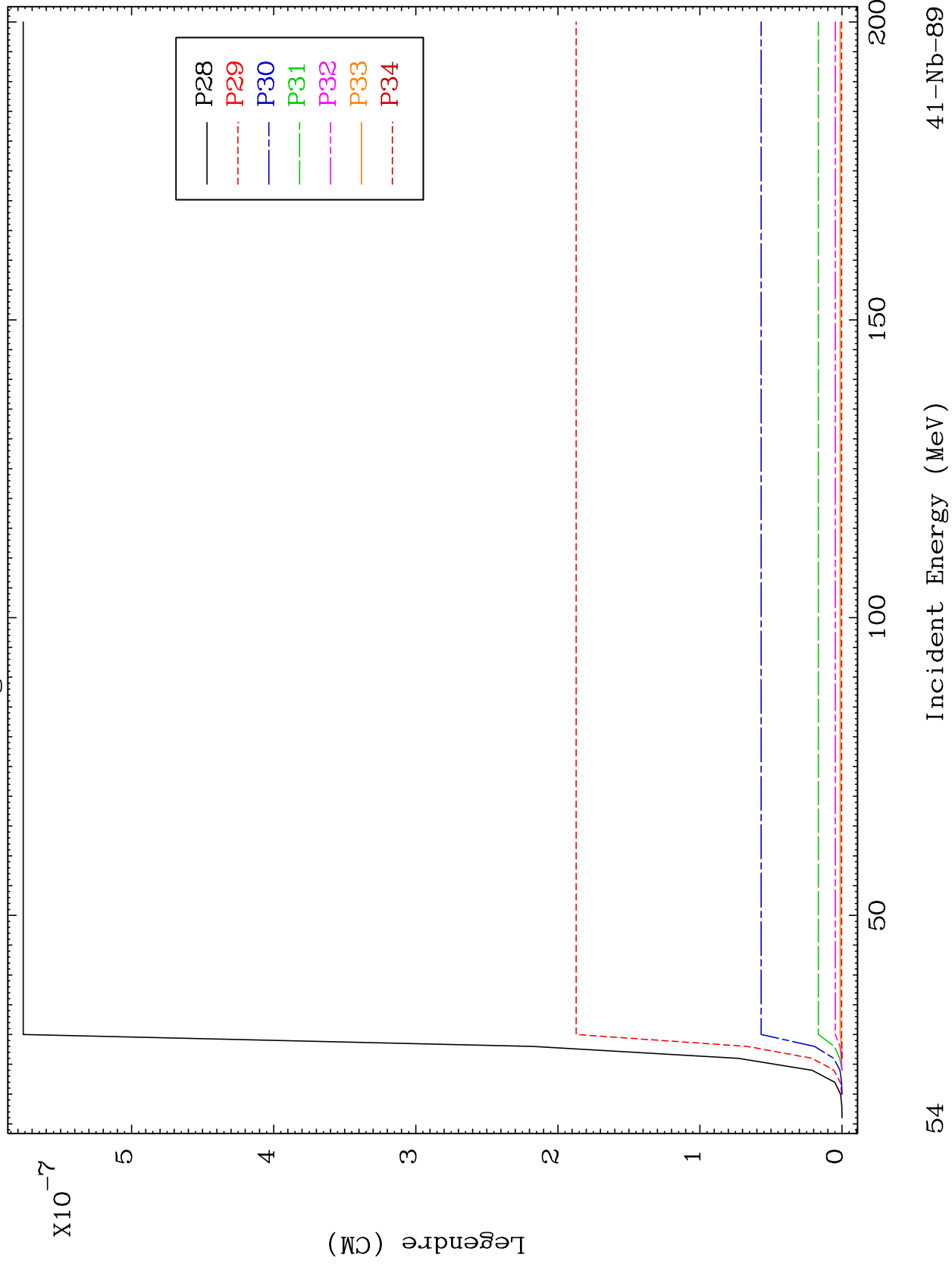
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



54

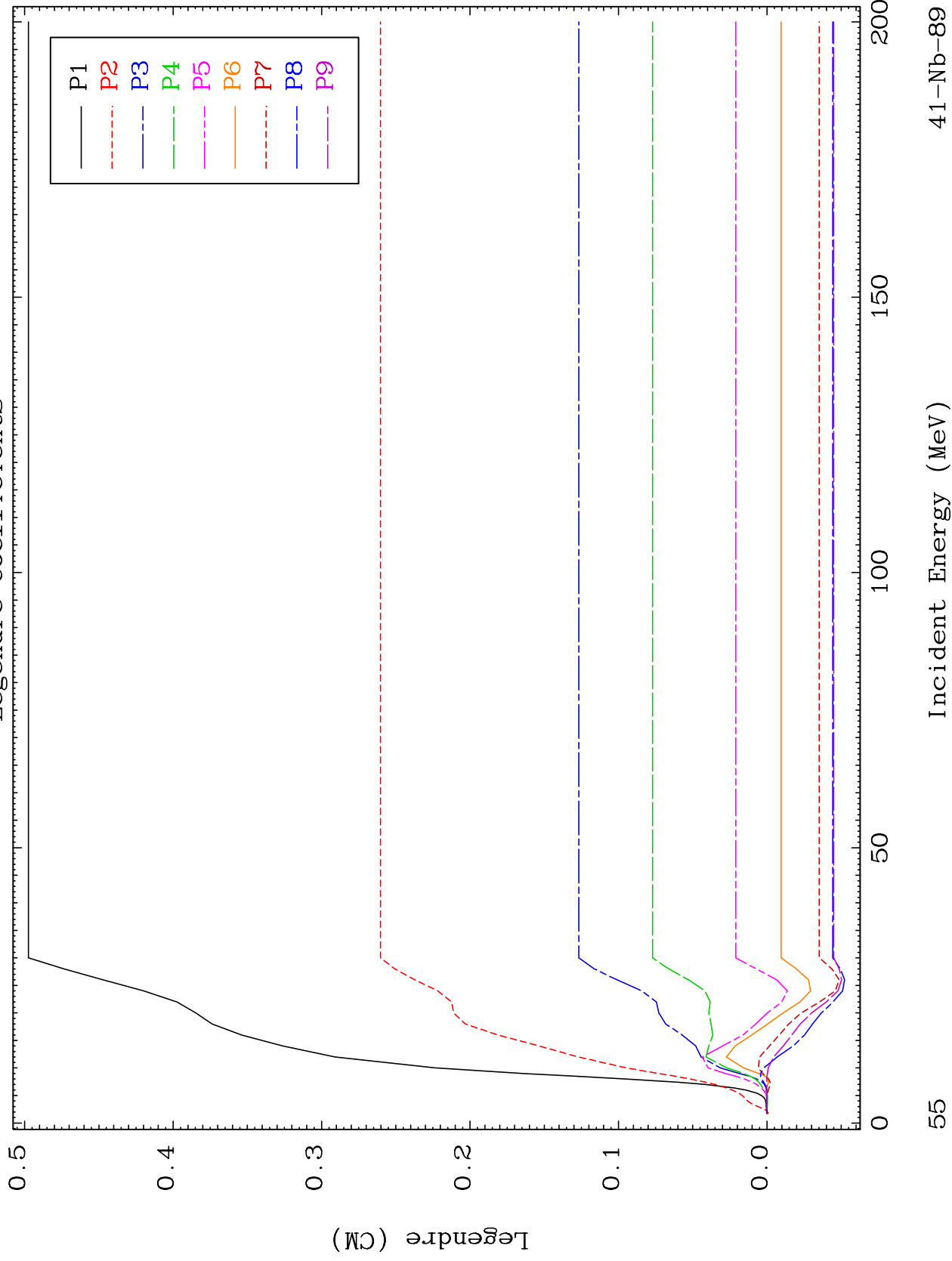
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



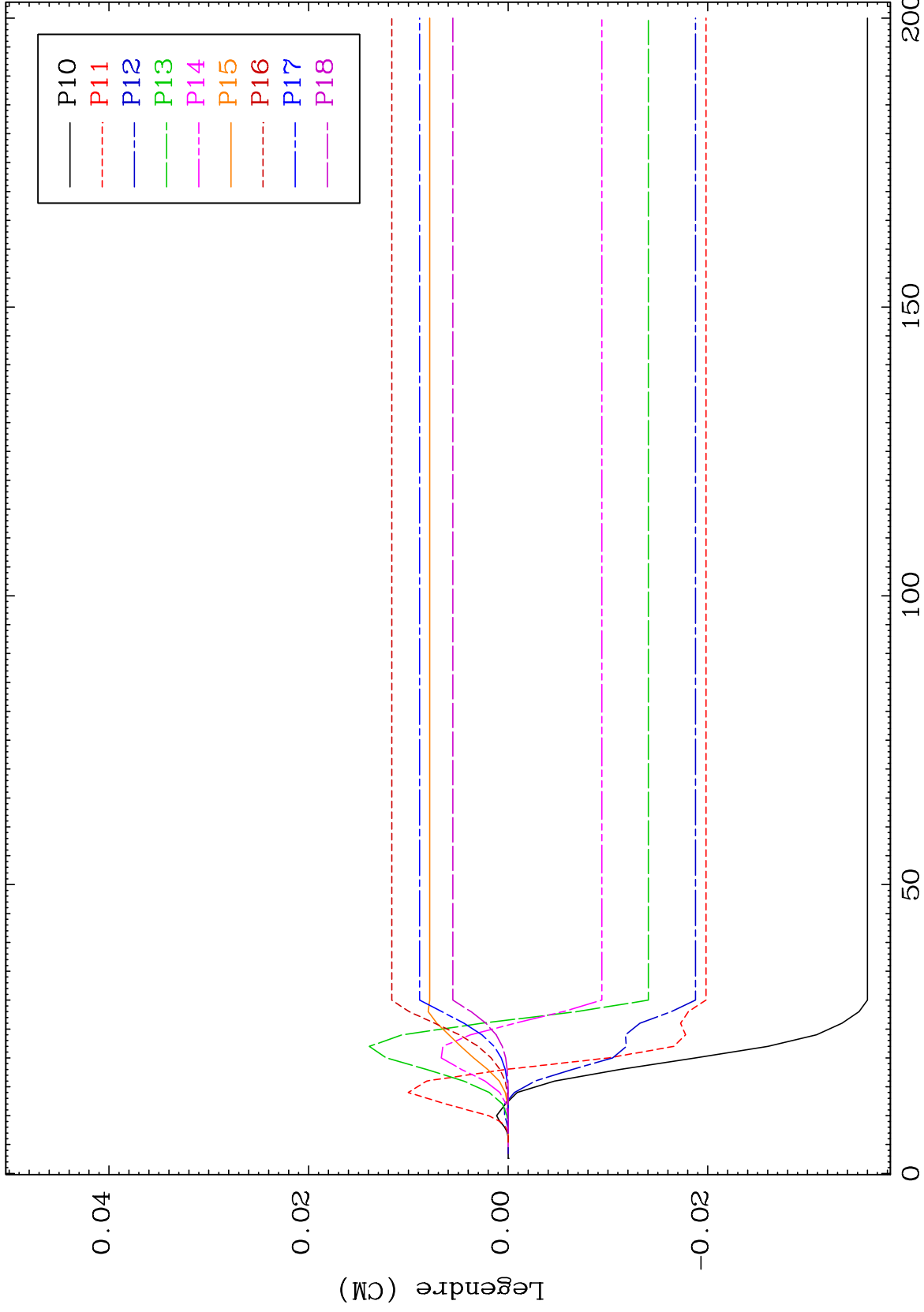
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41-Nb-89

MAT 4113

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

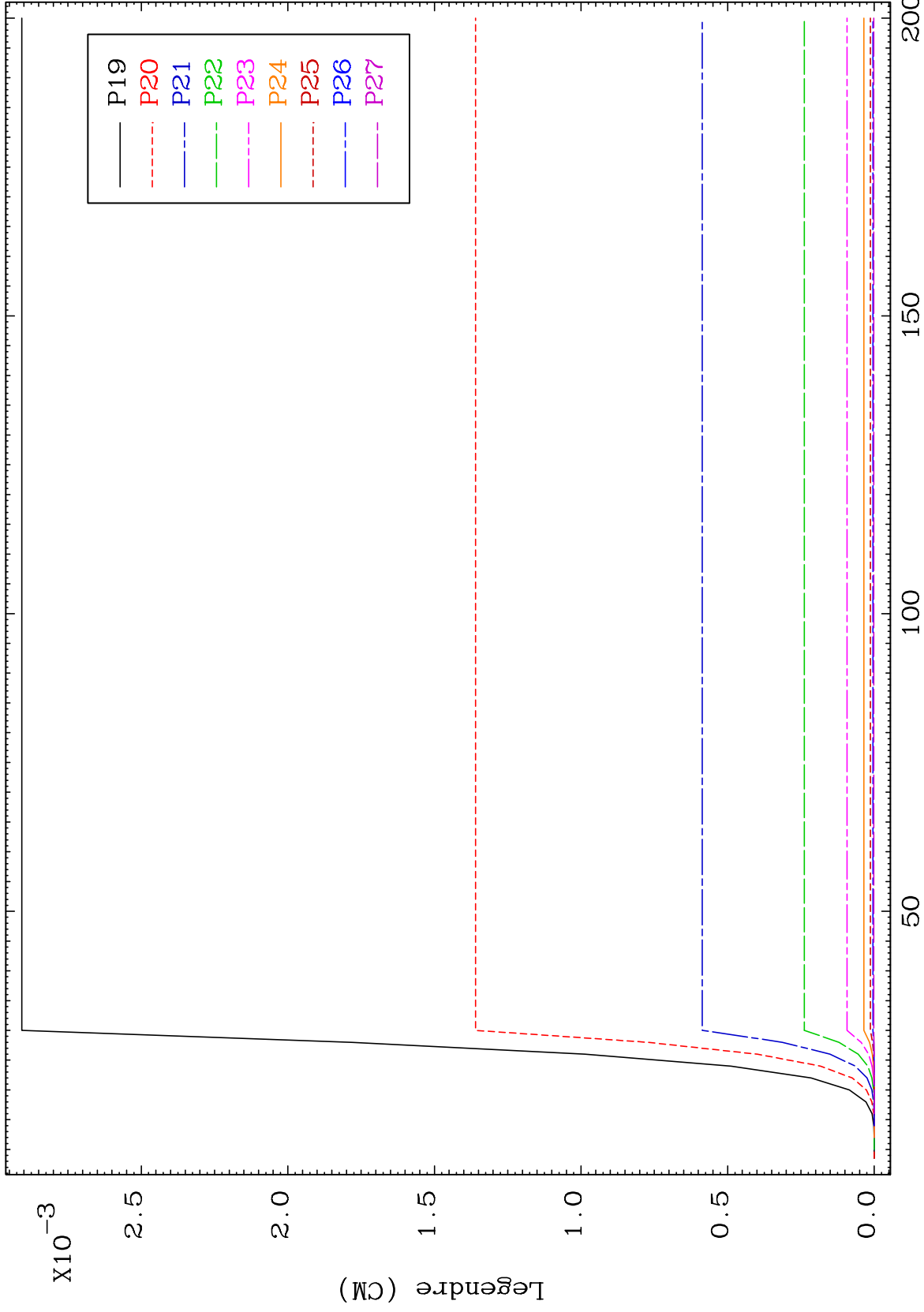
41-Nb-89



56

Incident Energy (MeV)

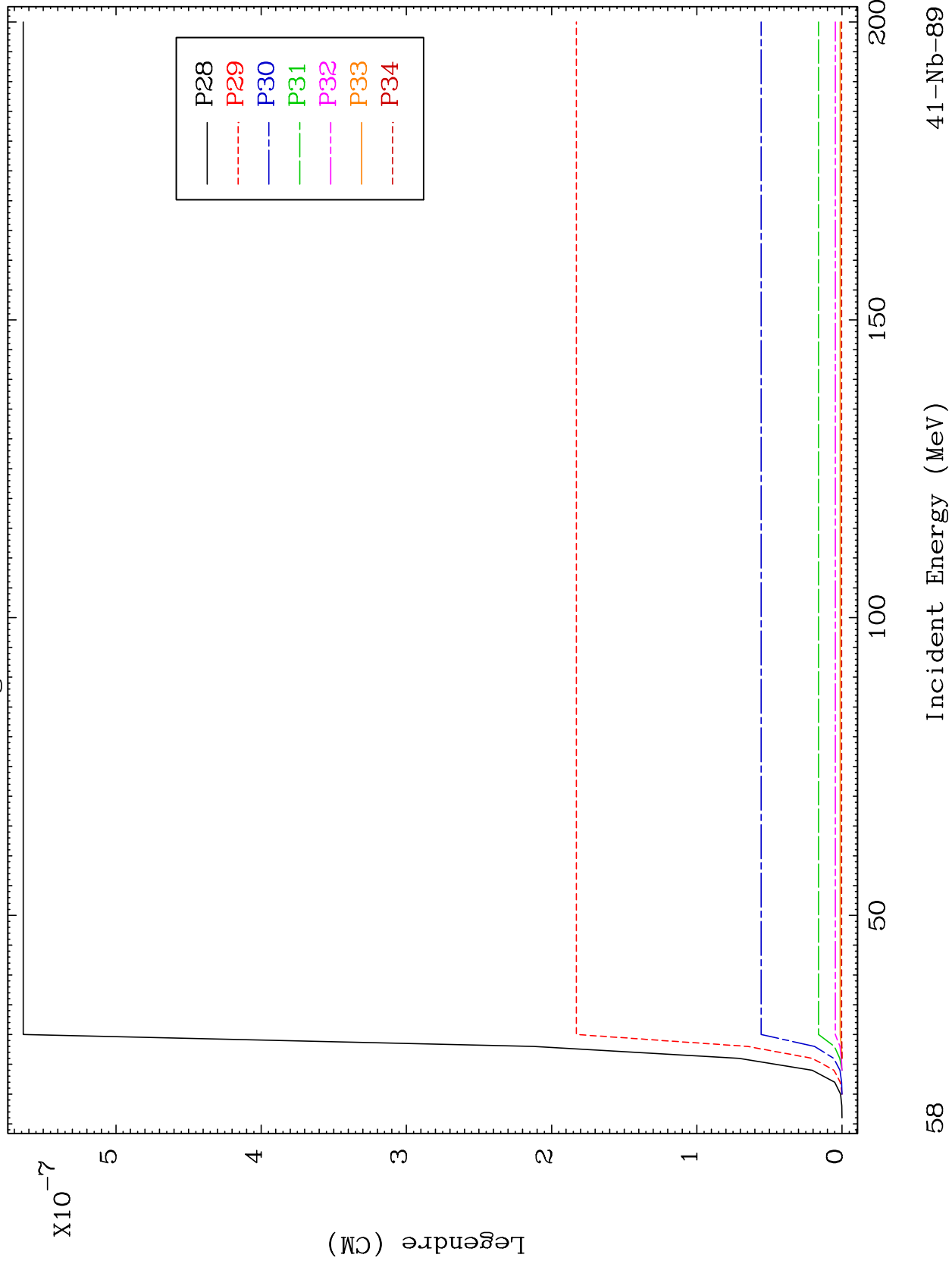
41-Nb-89



MAT 4113

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

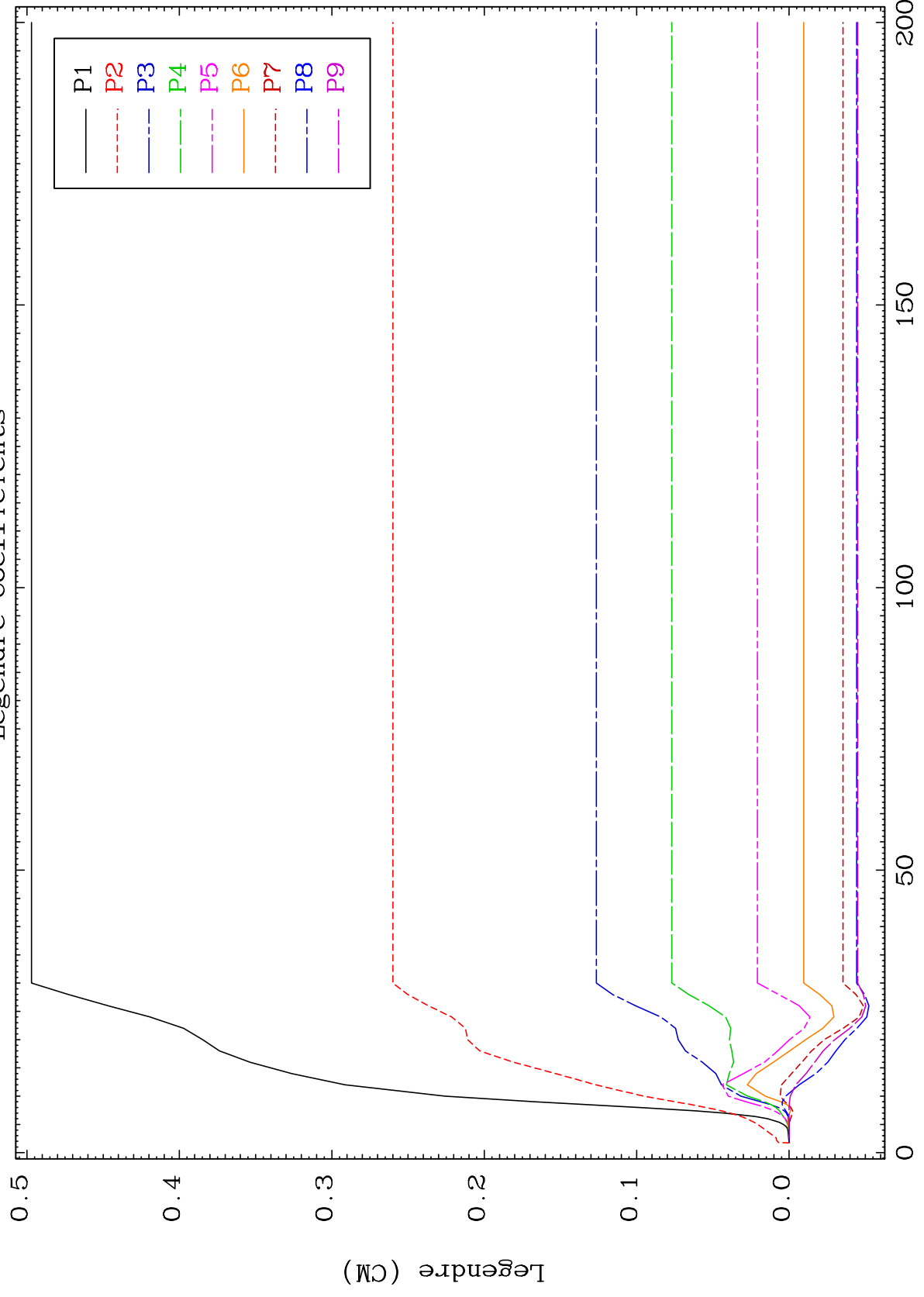
41-Nb-89



MAT 4113

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

41-Nb-89



59

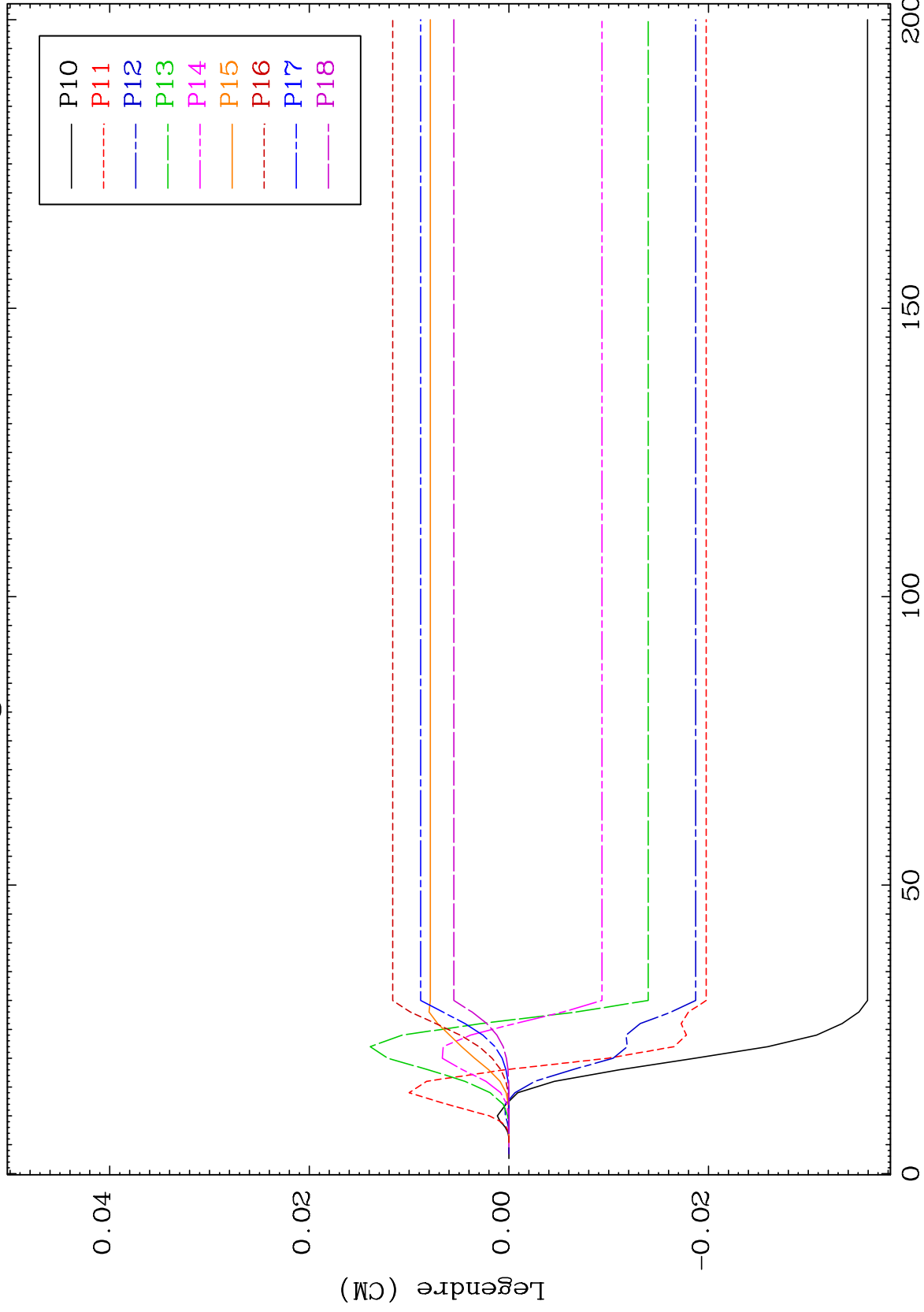
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



60

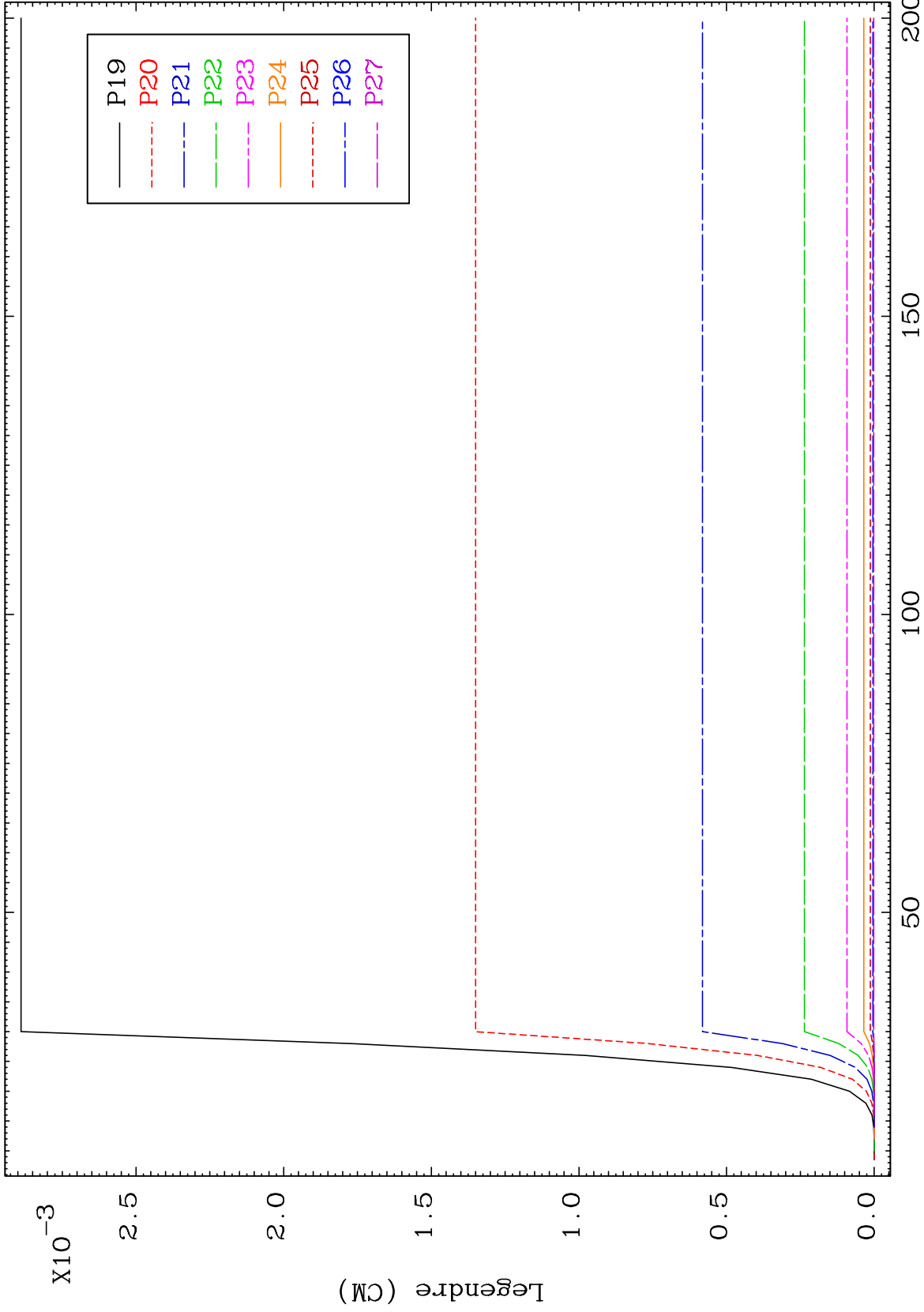
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



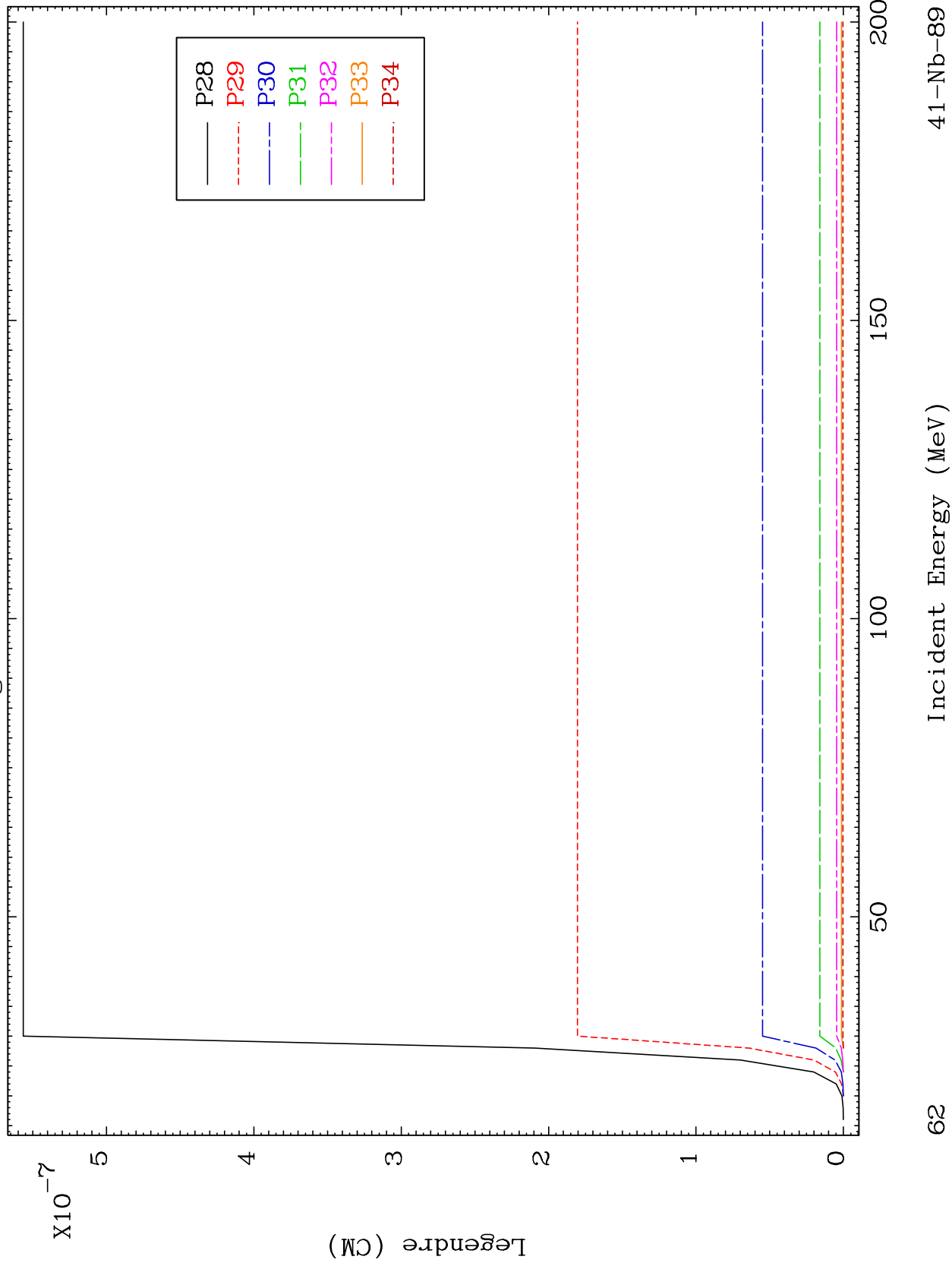
61

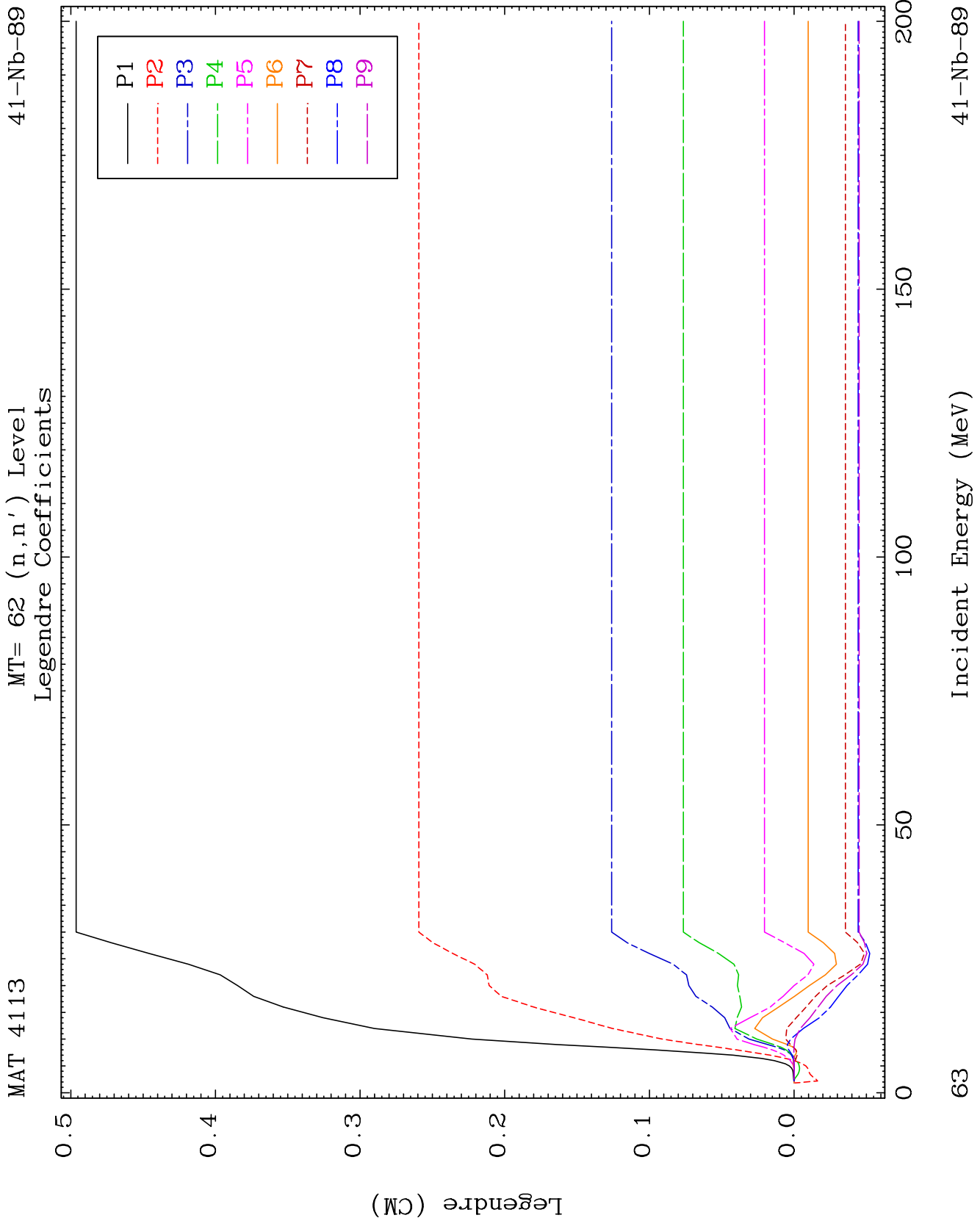
41-Nb-89

MAT 4113

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

41-Nb-89

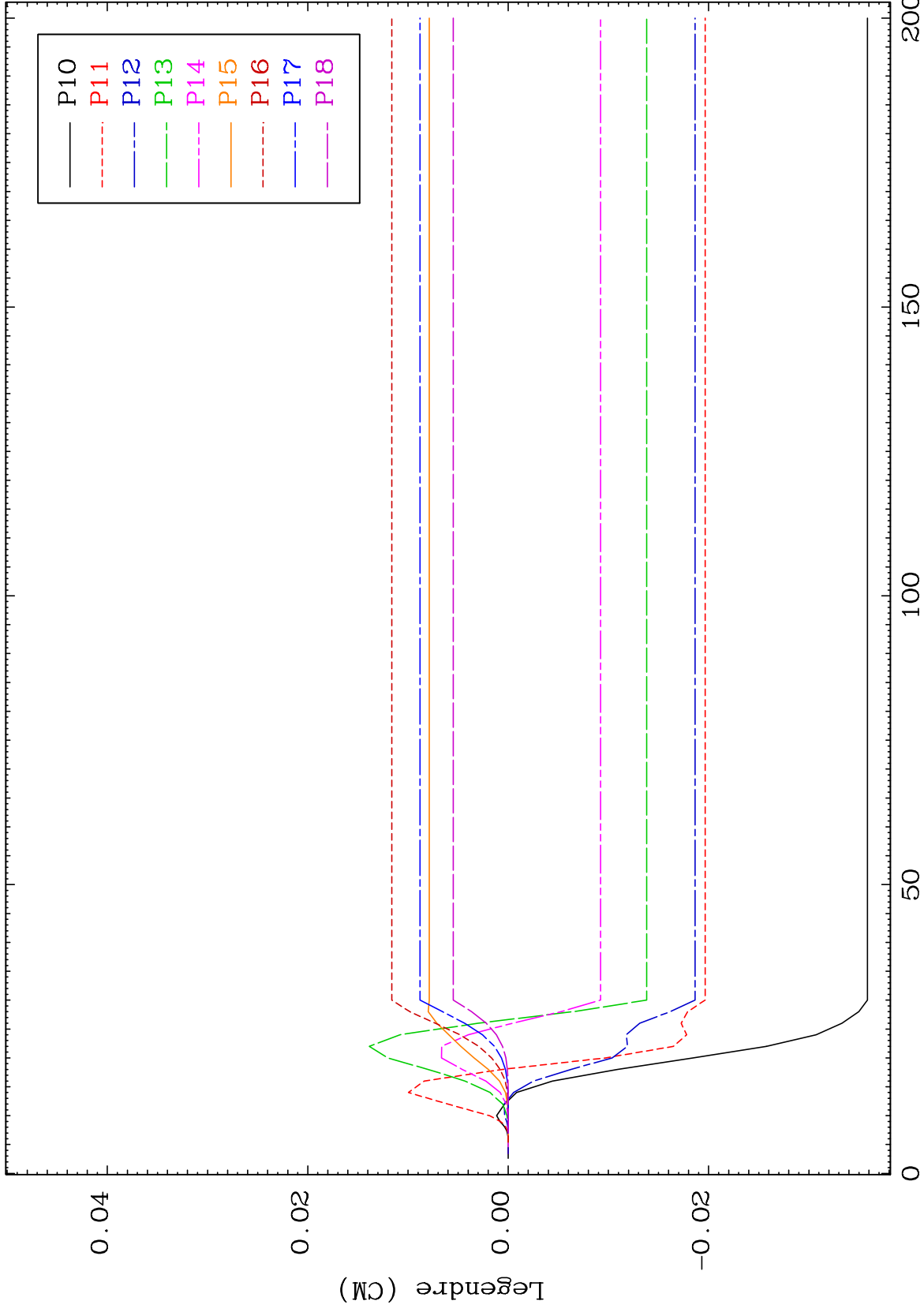




MAT 4113

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

41-Nb-89



64

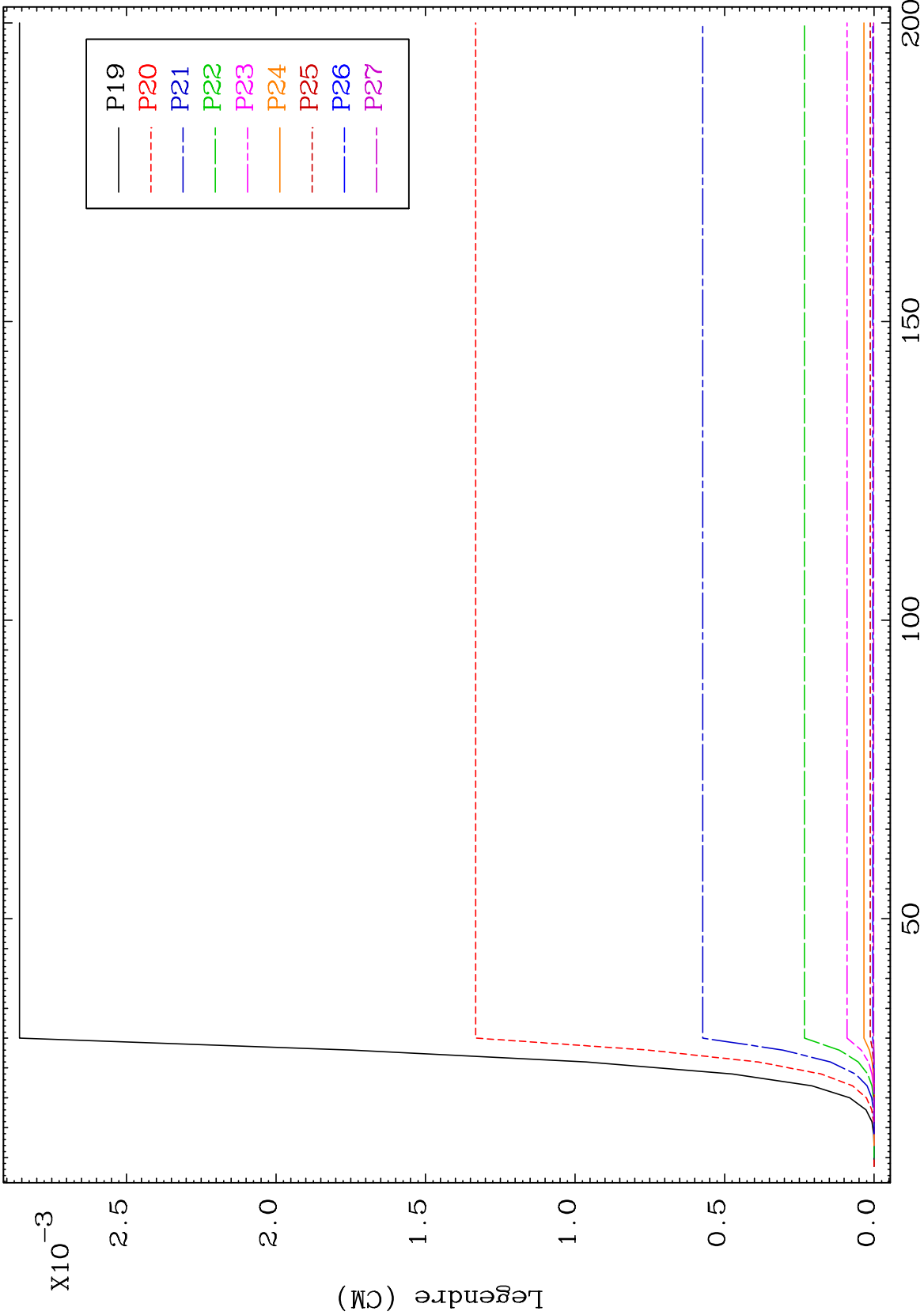
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



65

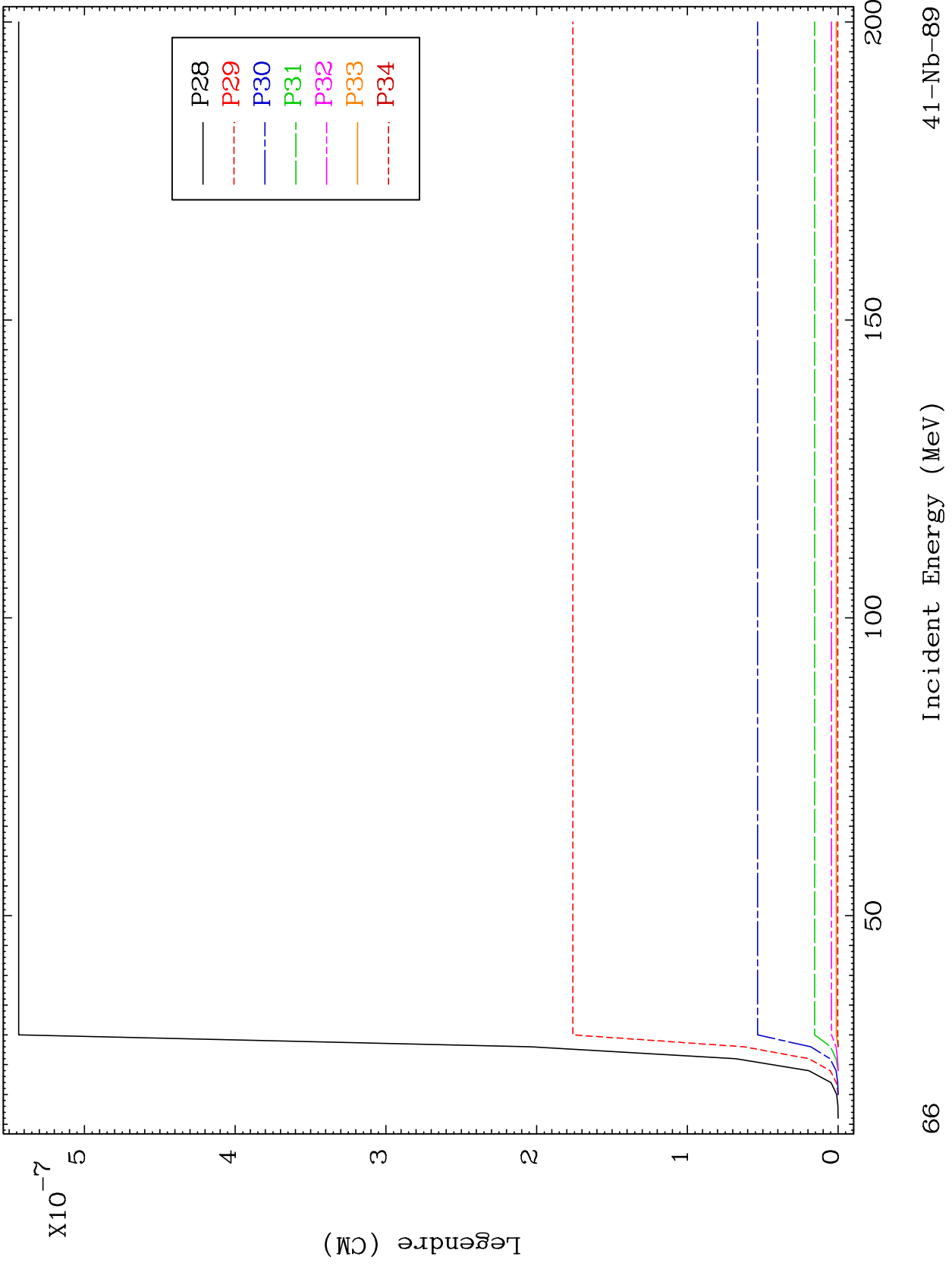
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



66

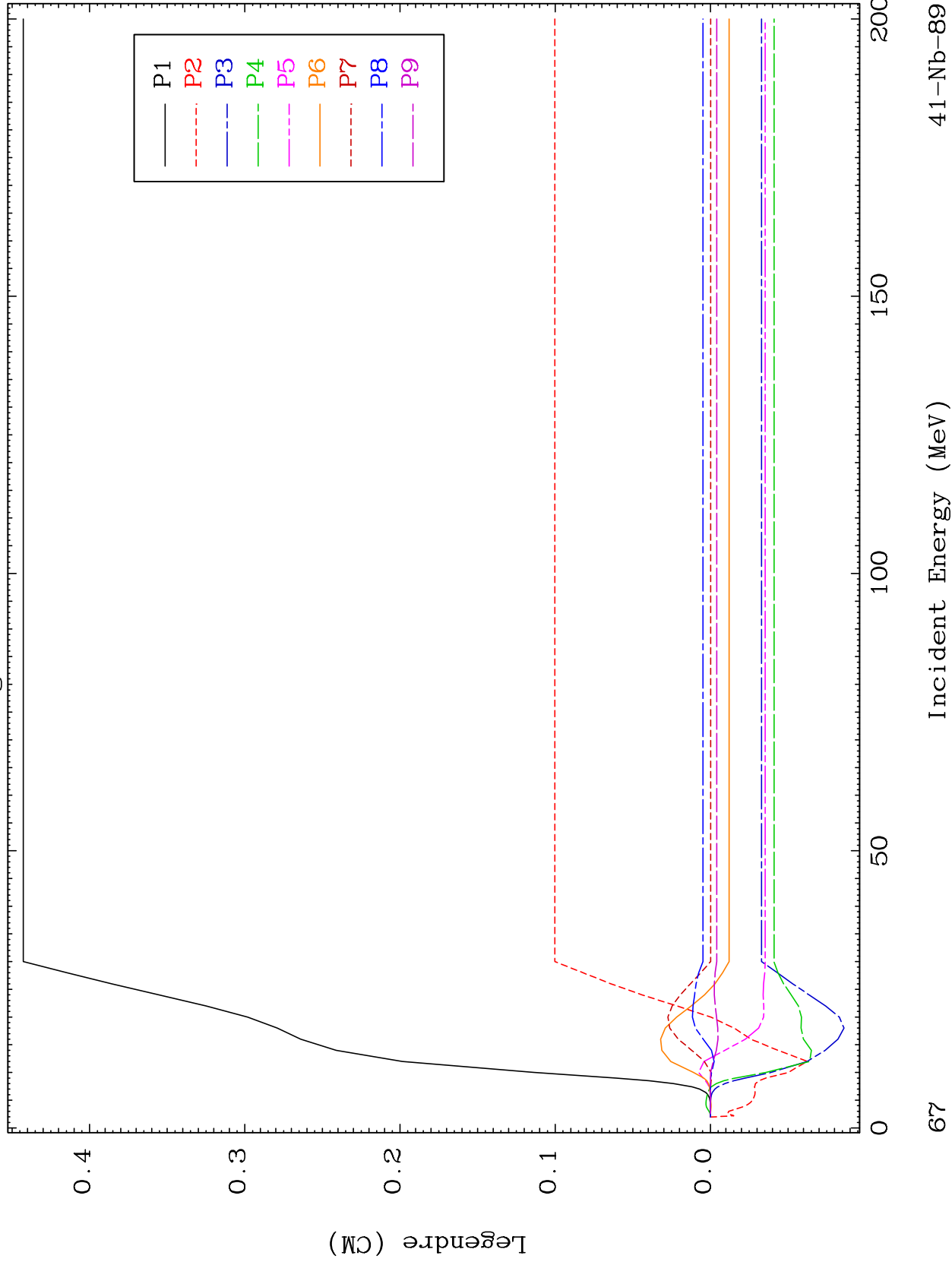
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



41-Nb-89

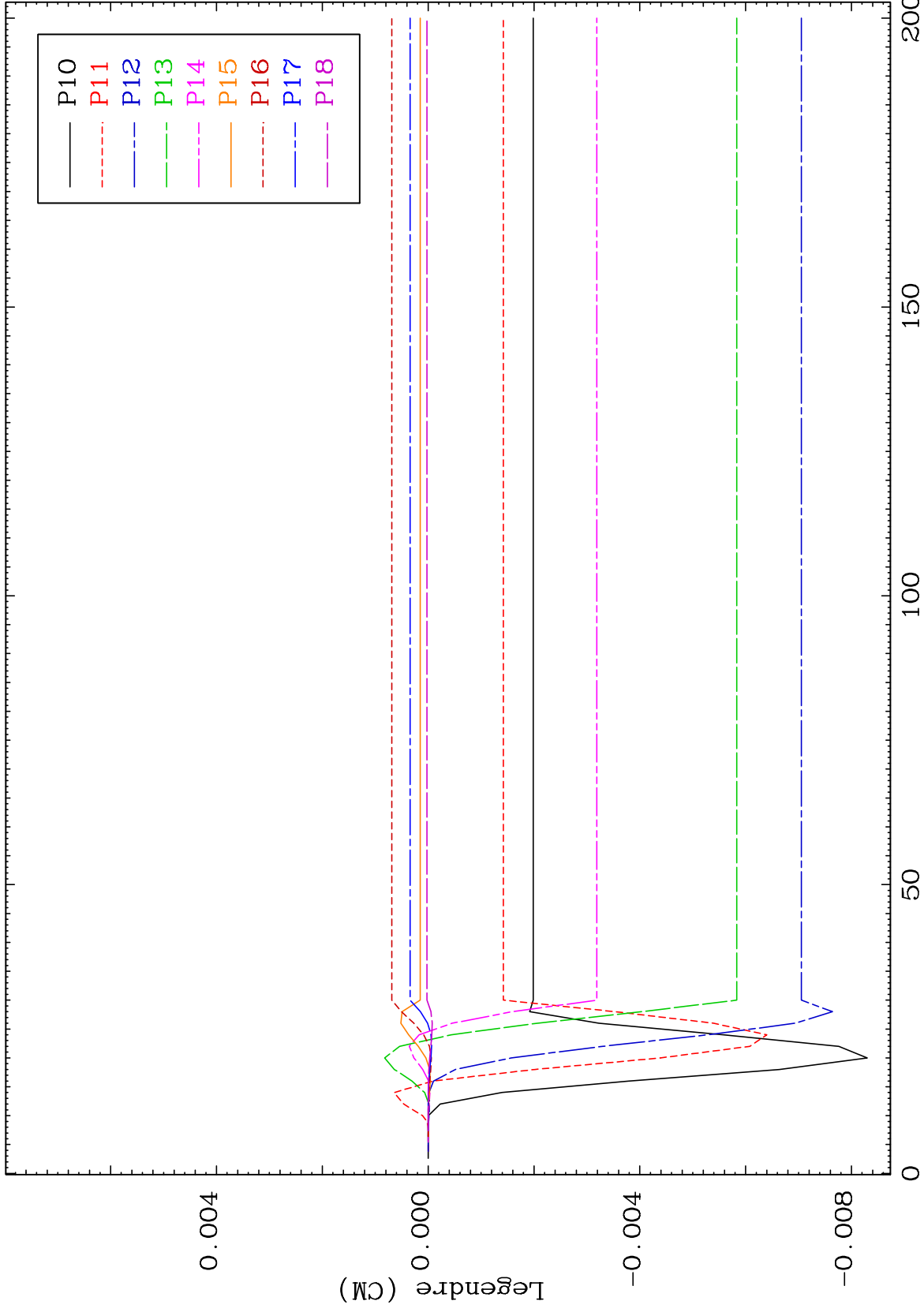
Incident Energy (MeV)

67

MAT 4113

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

41-Nb-89



68

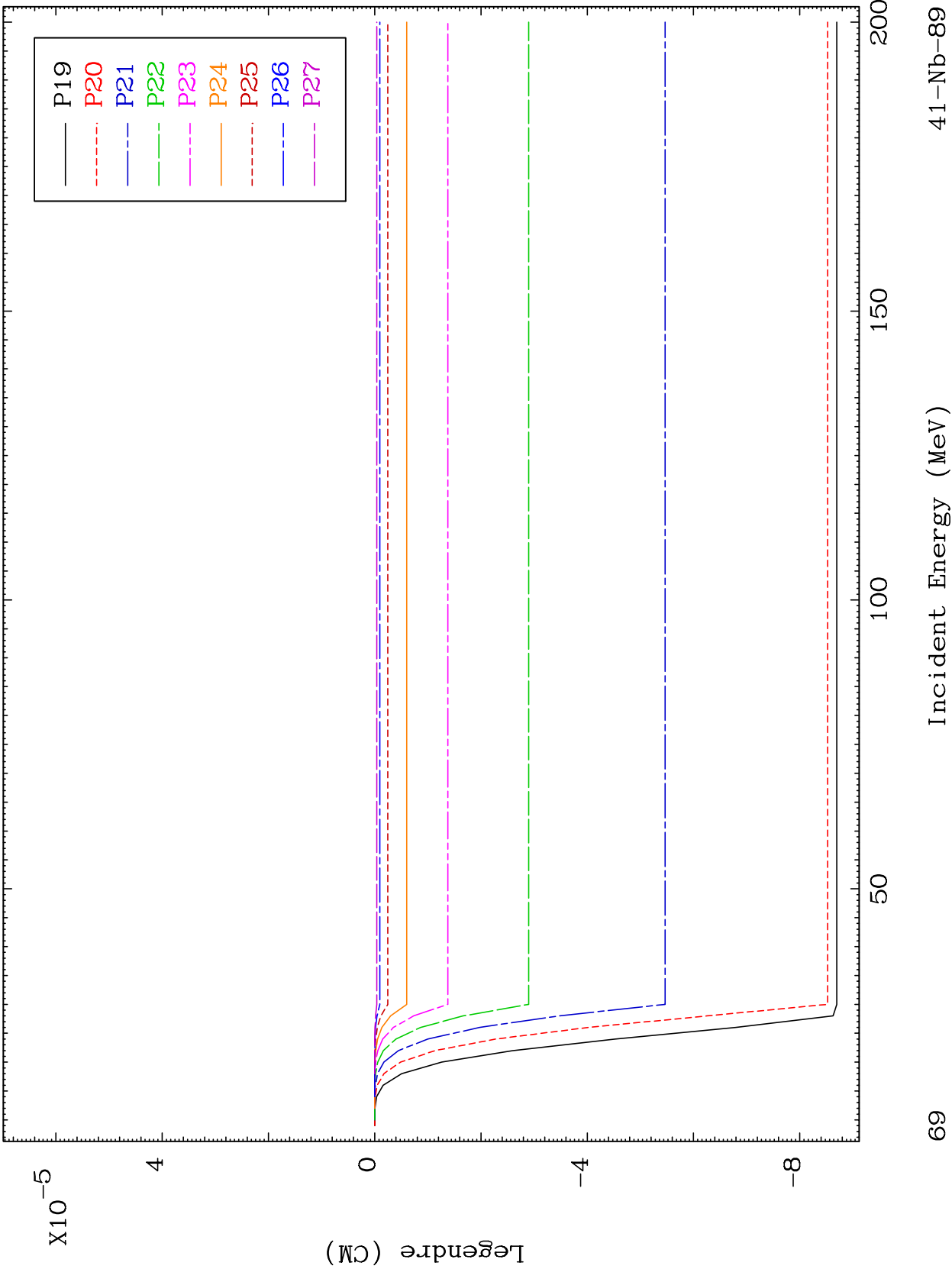
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



69

Incident Energy (MeV)

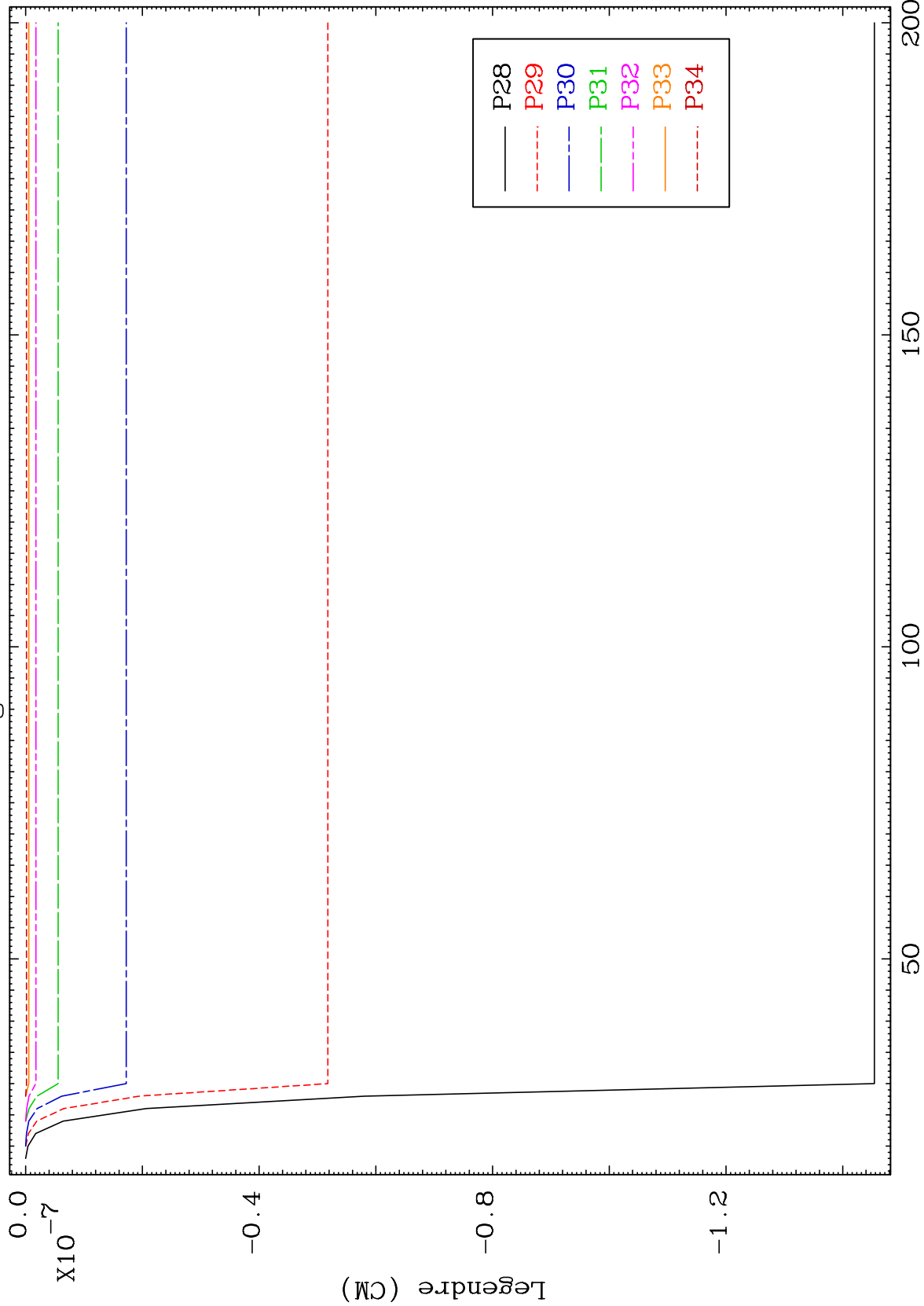
41-Nb-89

MAT 4113

MT= 63 (n,n') Level

41-Nb-89

Legendre Coefficients



70

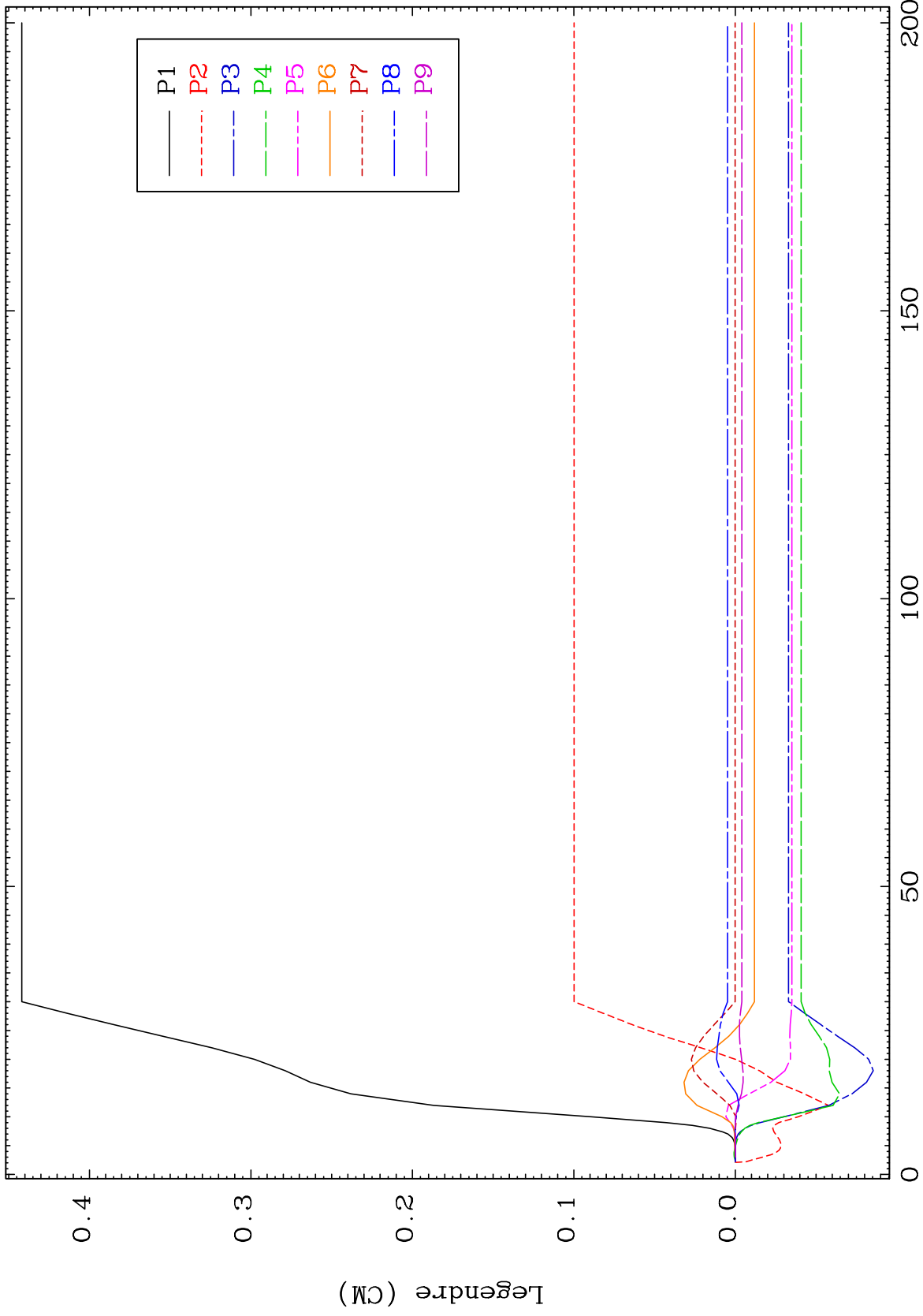
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



71

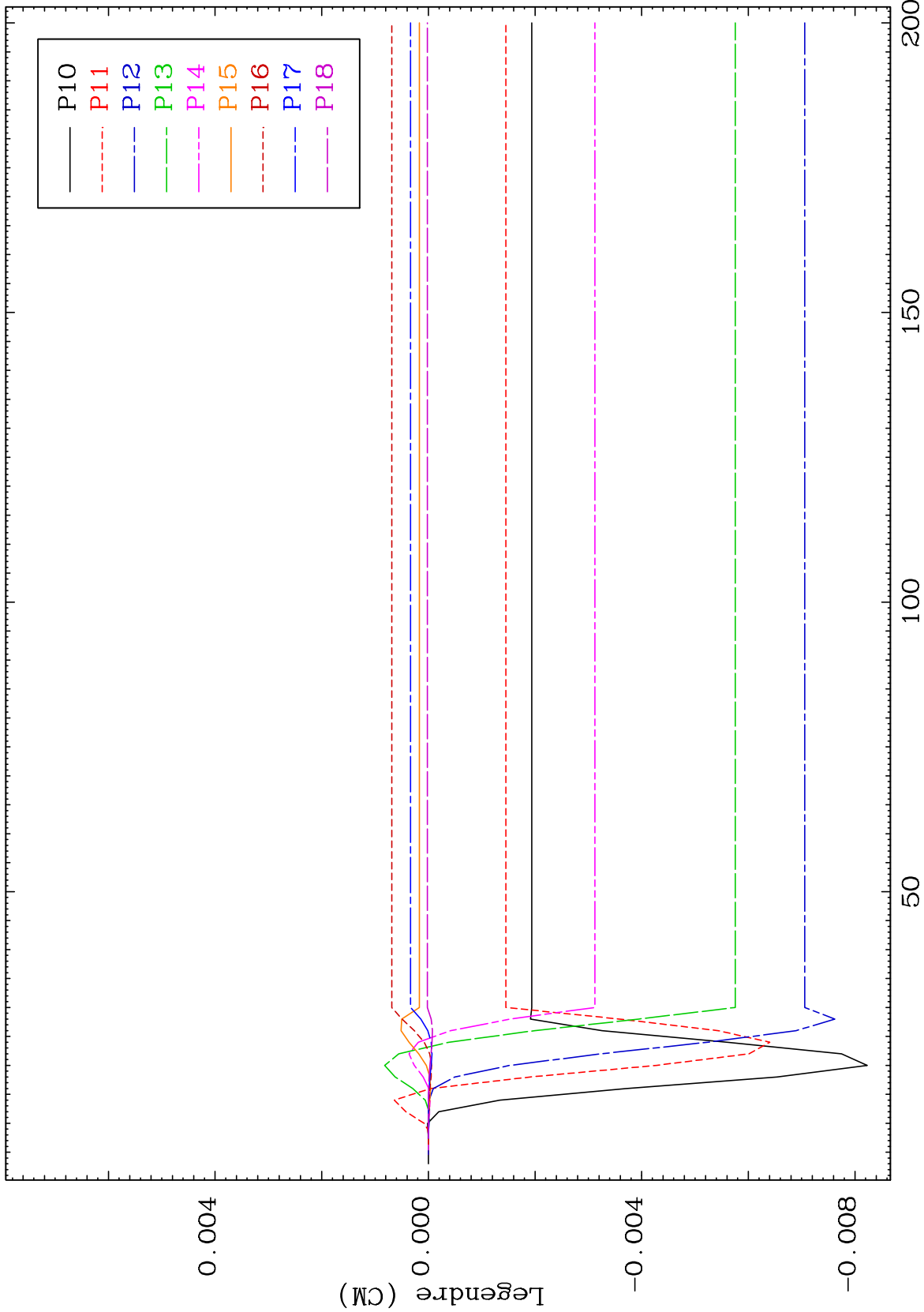
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



72

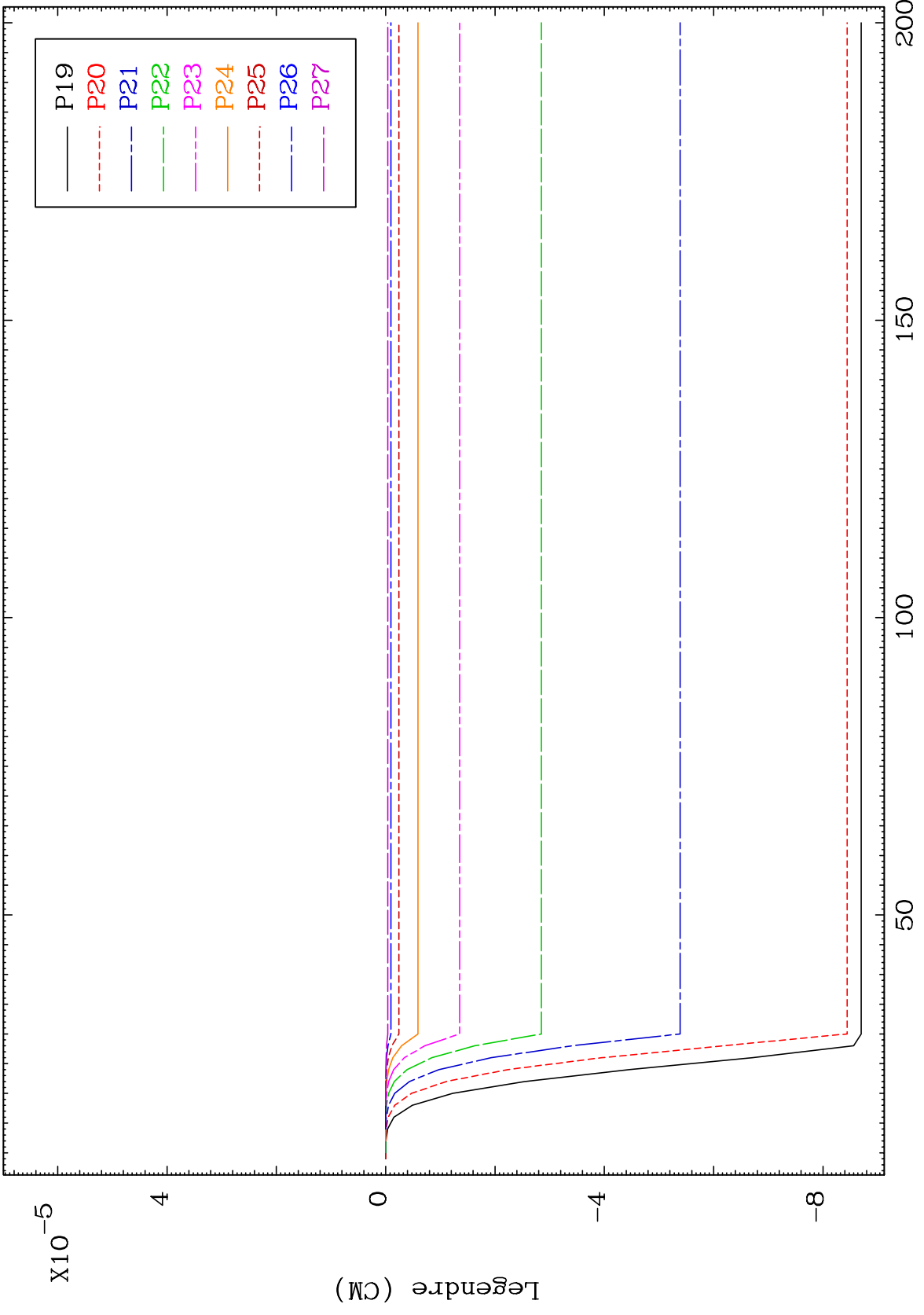
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



73

Incident Energy (MeV)

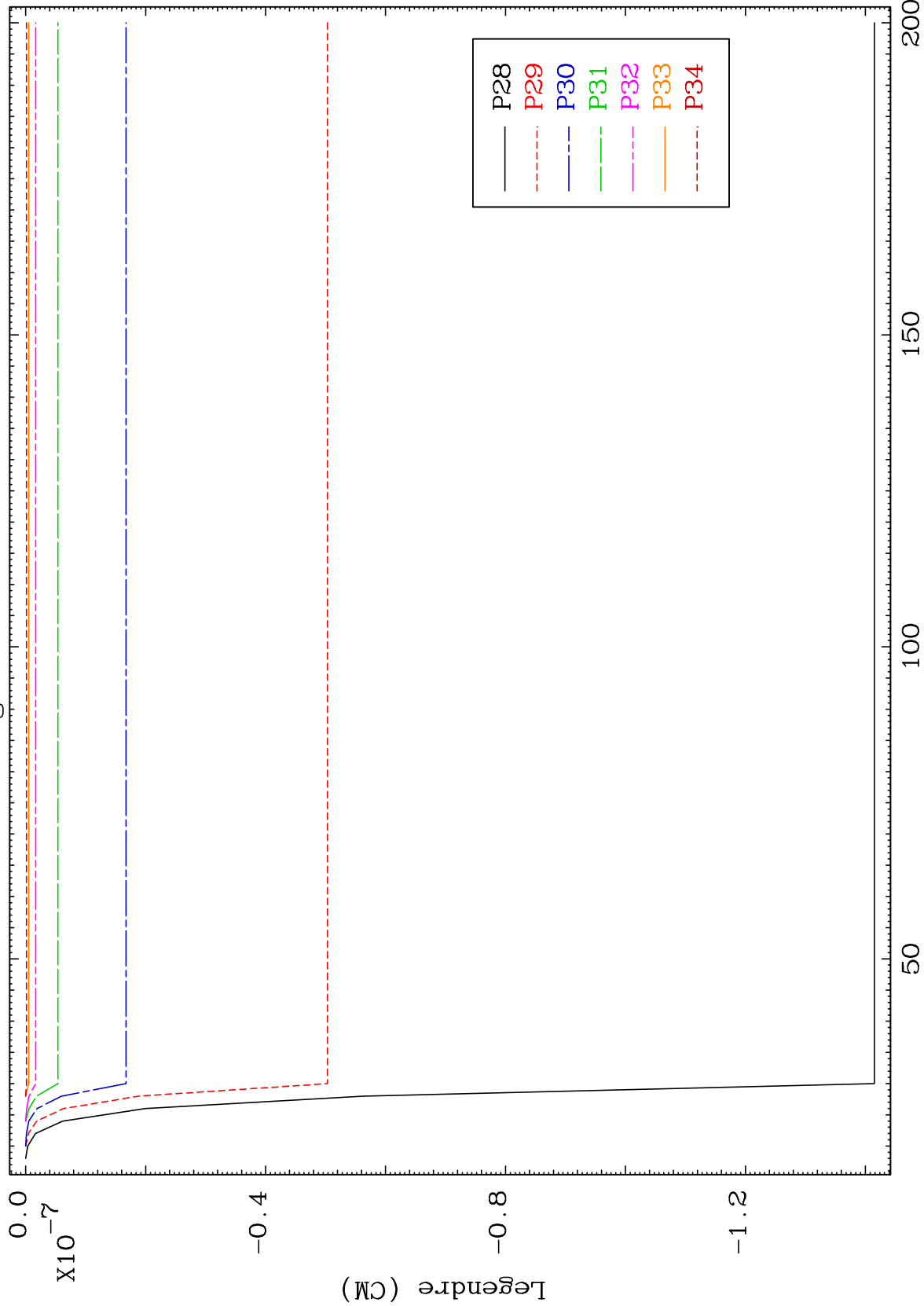
41-Nb-89

MAT 4113

MT= 64 (n,n') Level

41-Nb-89

Legendre Coefficients



74

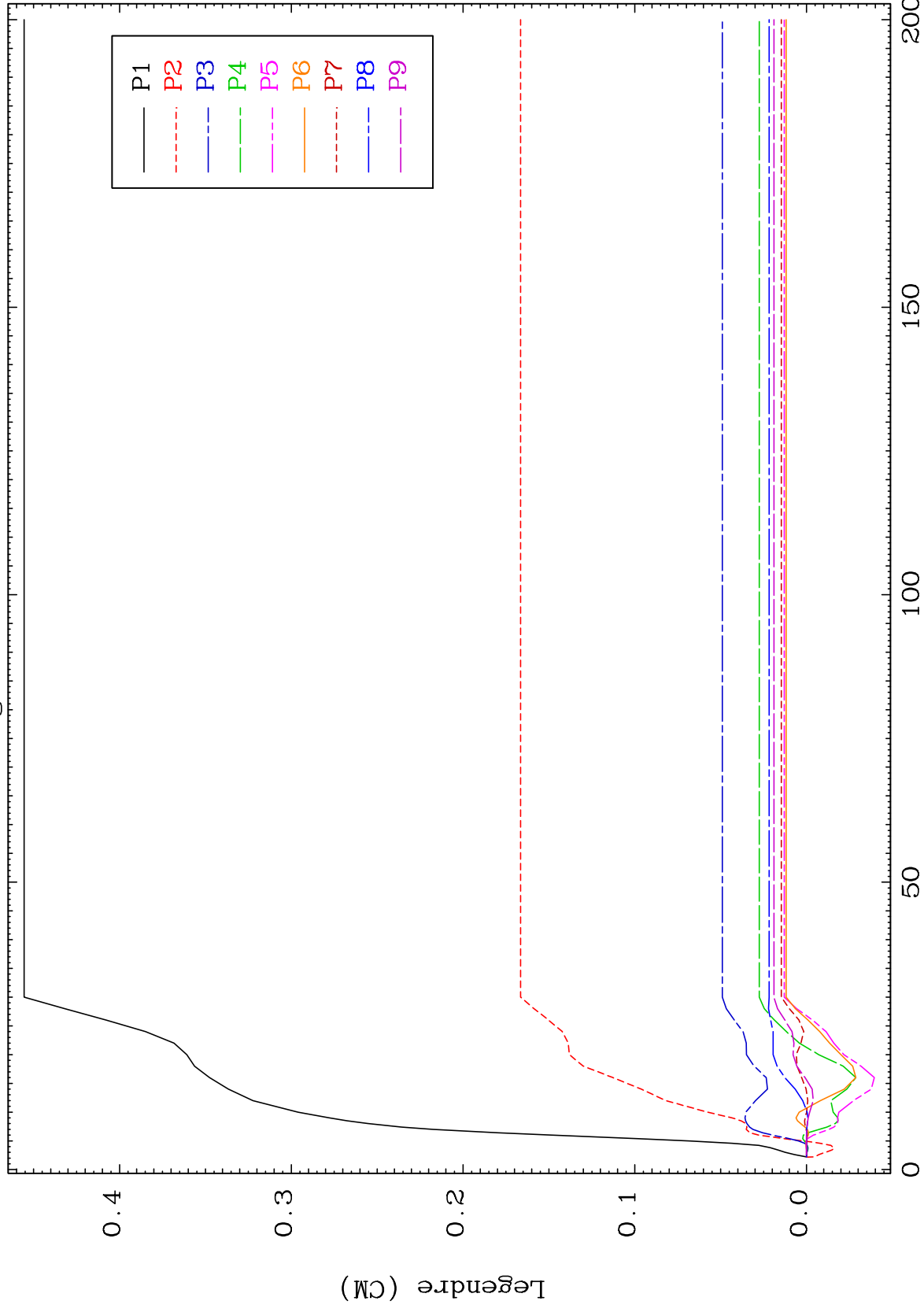
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



75

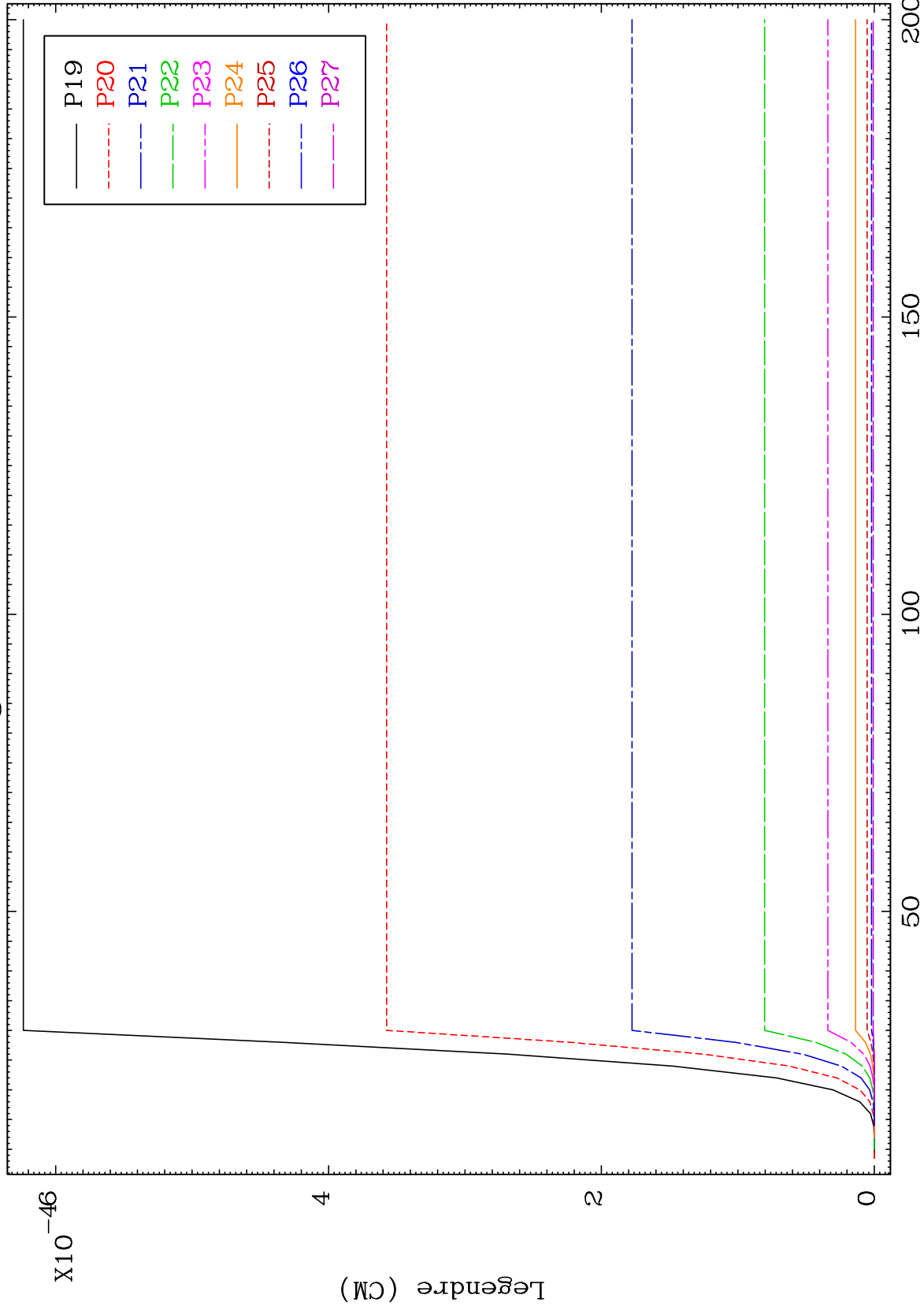
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



77

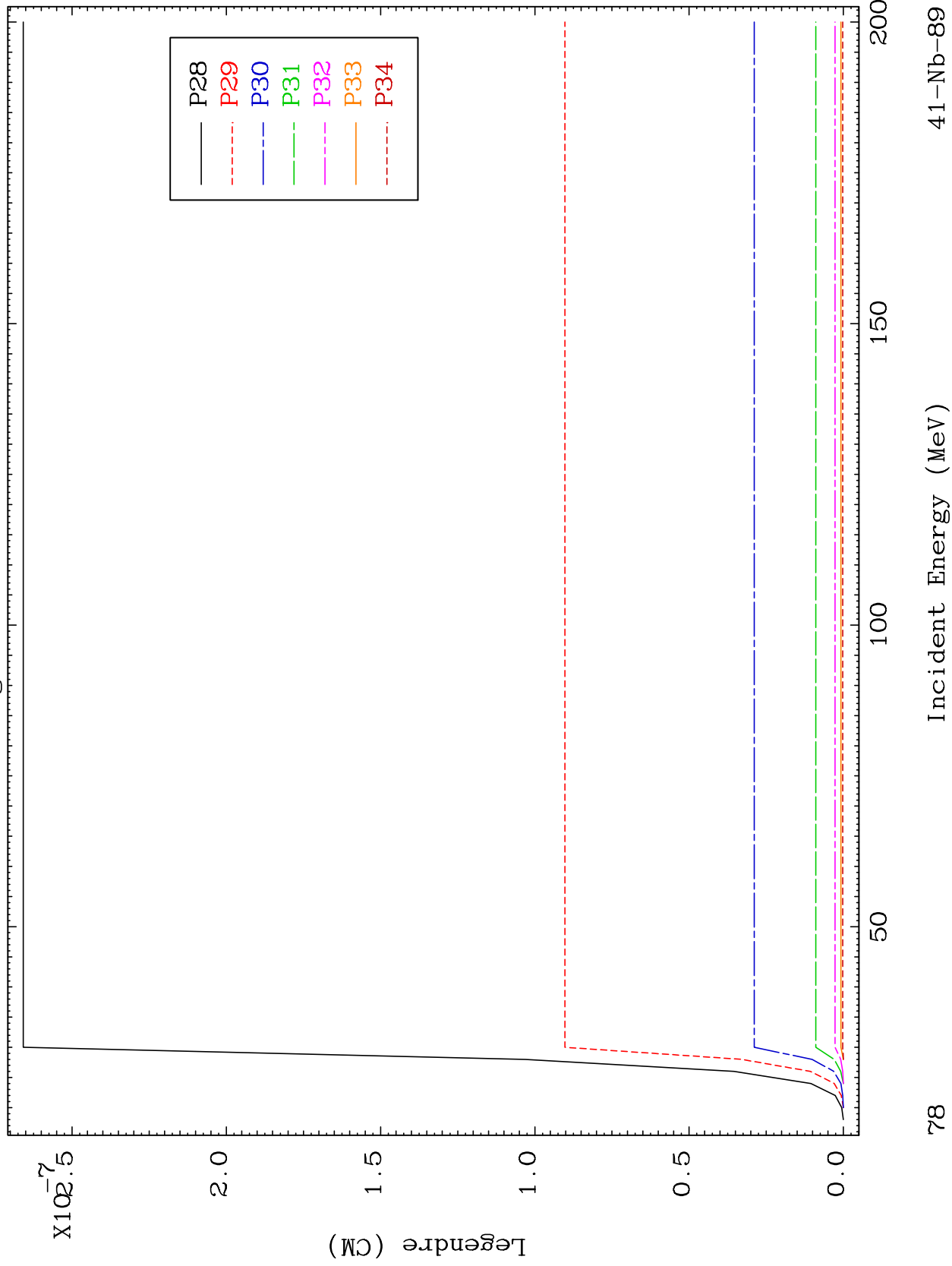
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



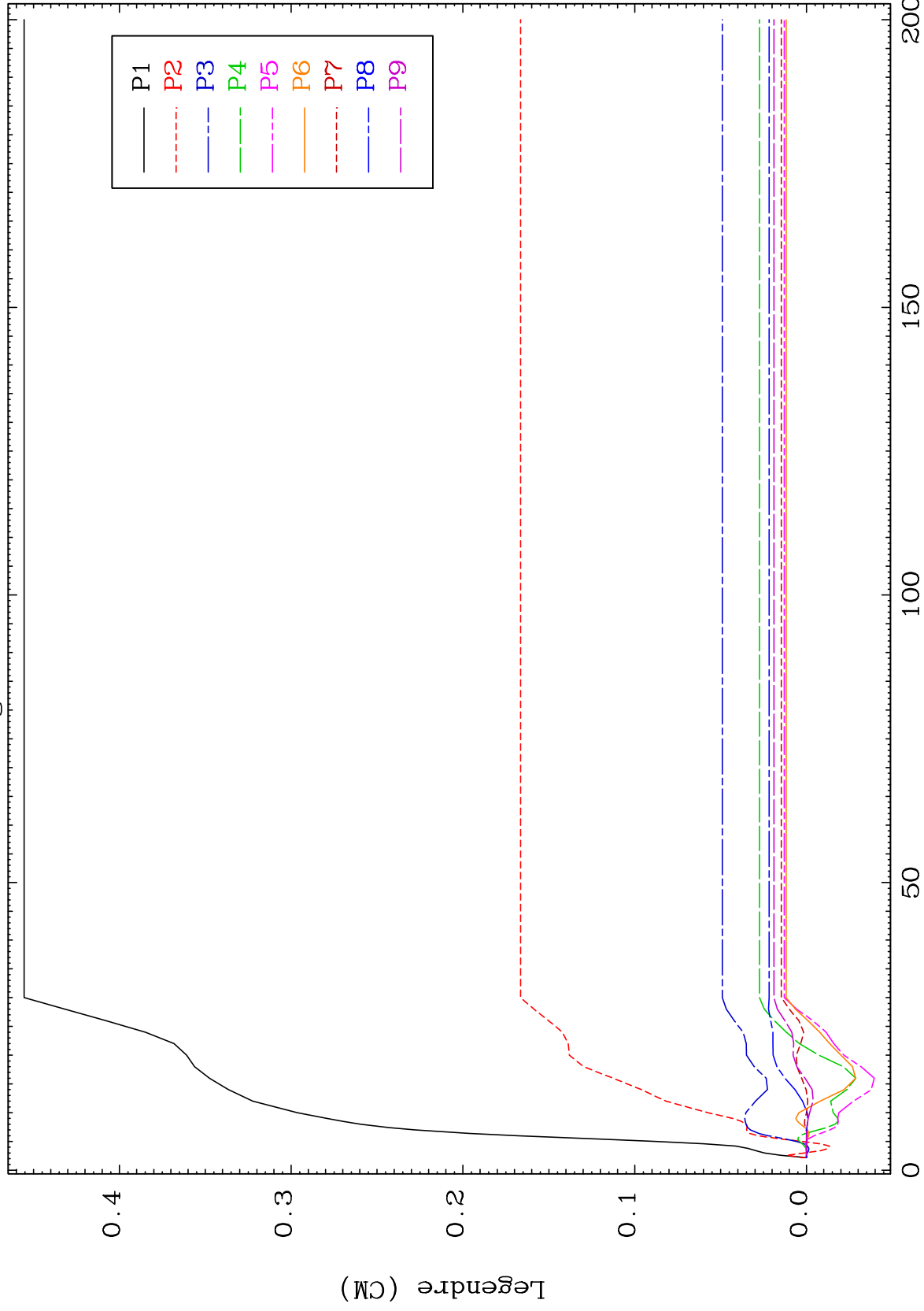
78

41-Nb-89

MAT 4113

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

41-Nb-89



79

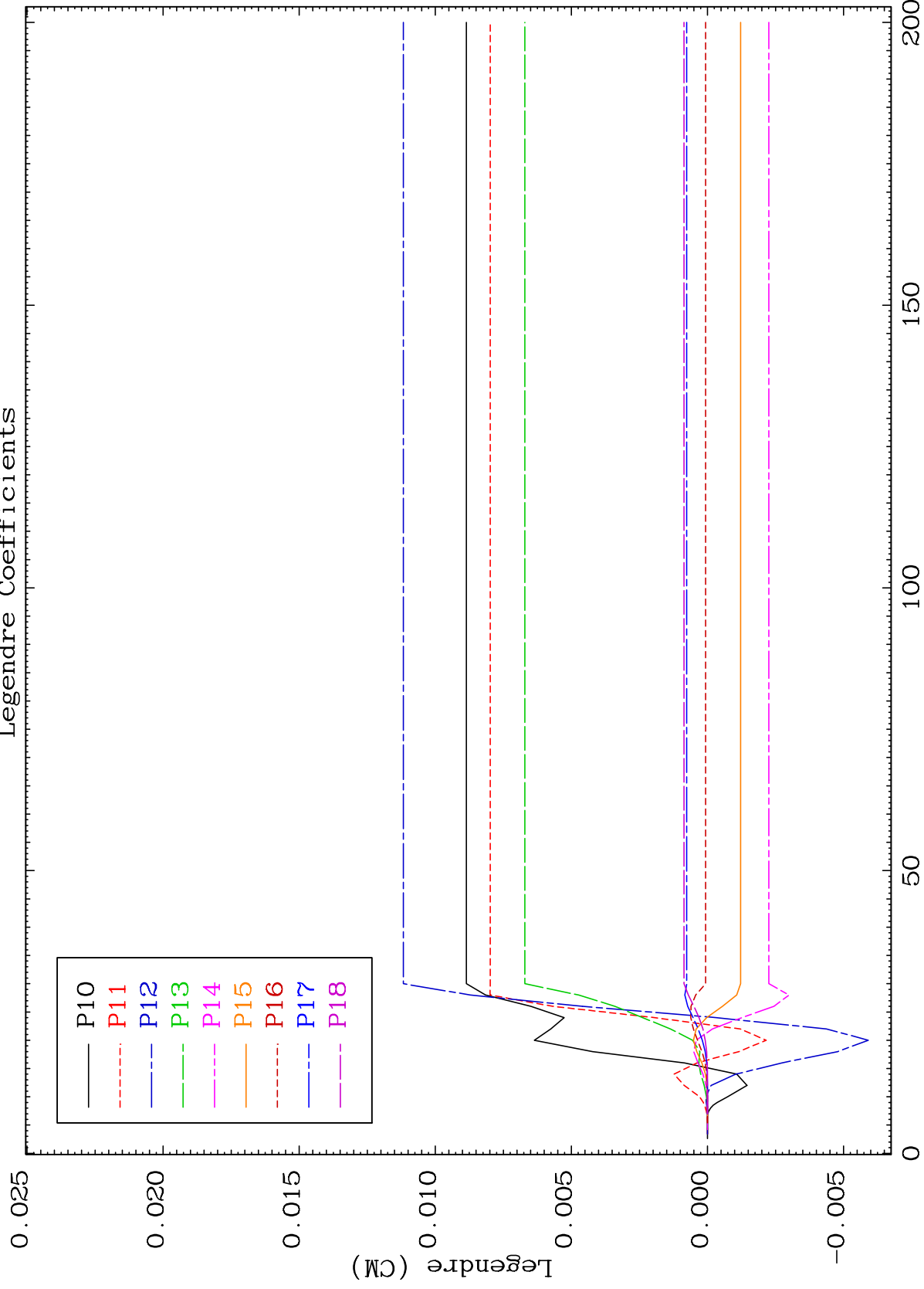
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



80

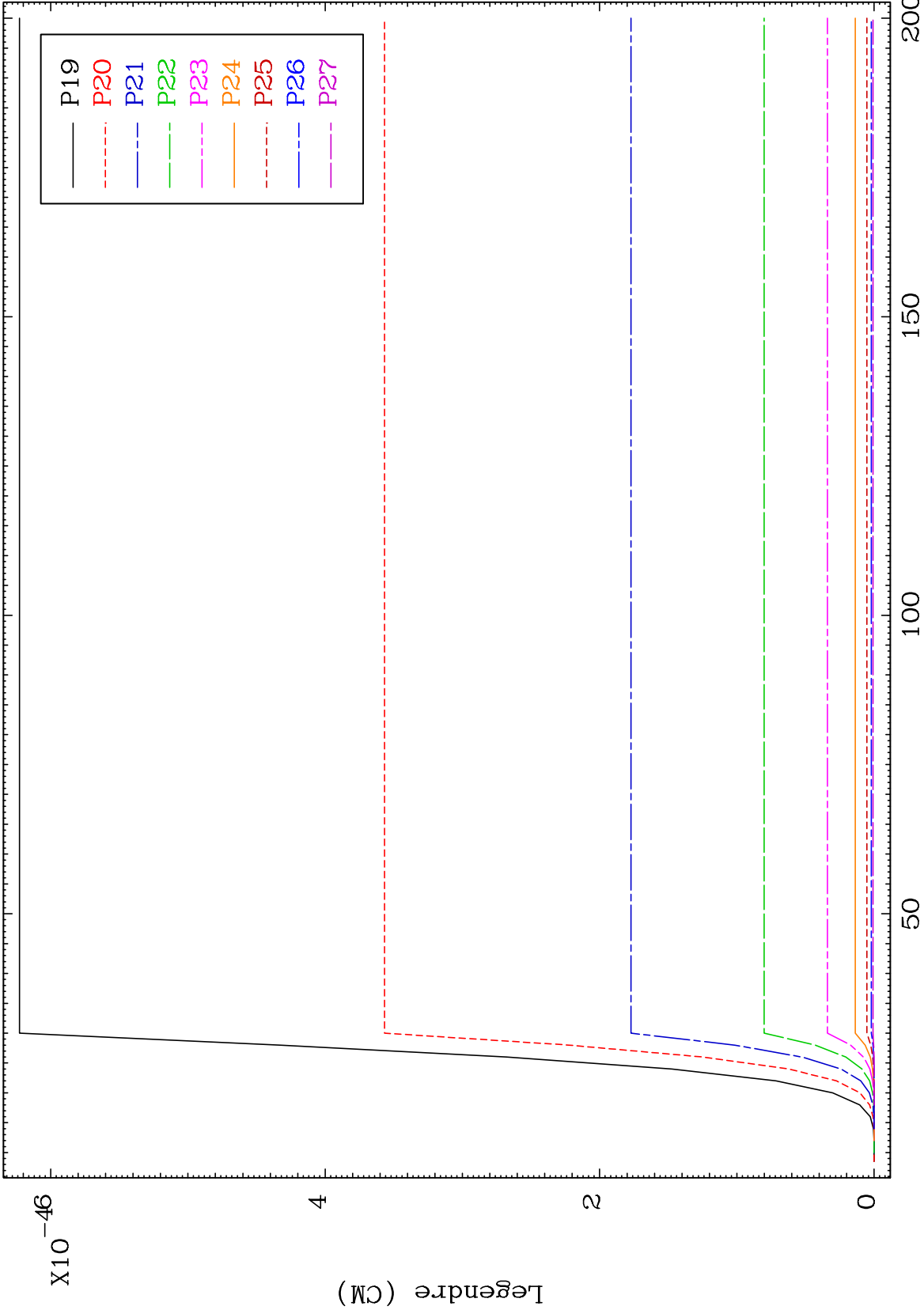
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



$\times 10^{-46}$

Legendre (CM)

50

100

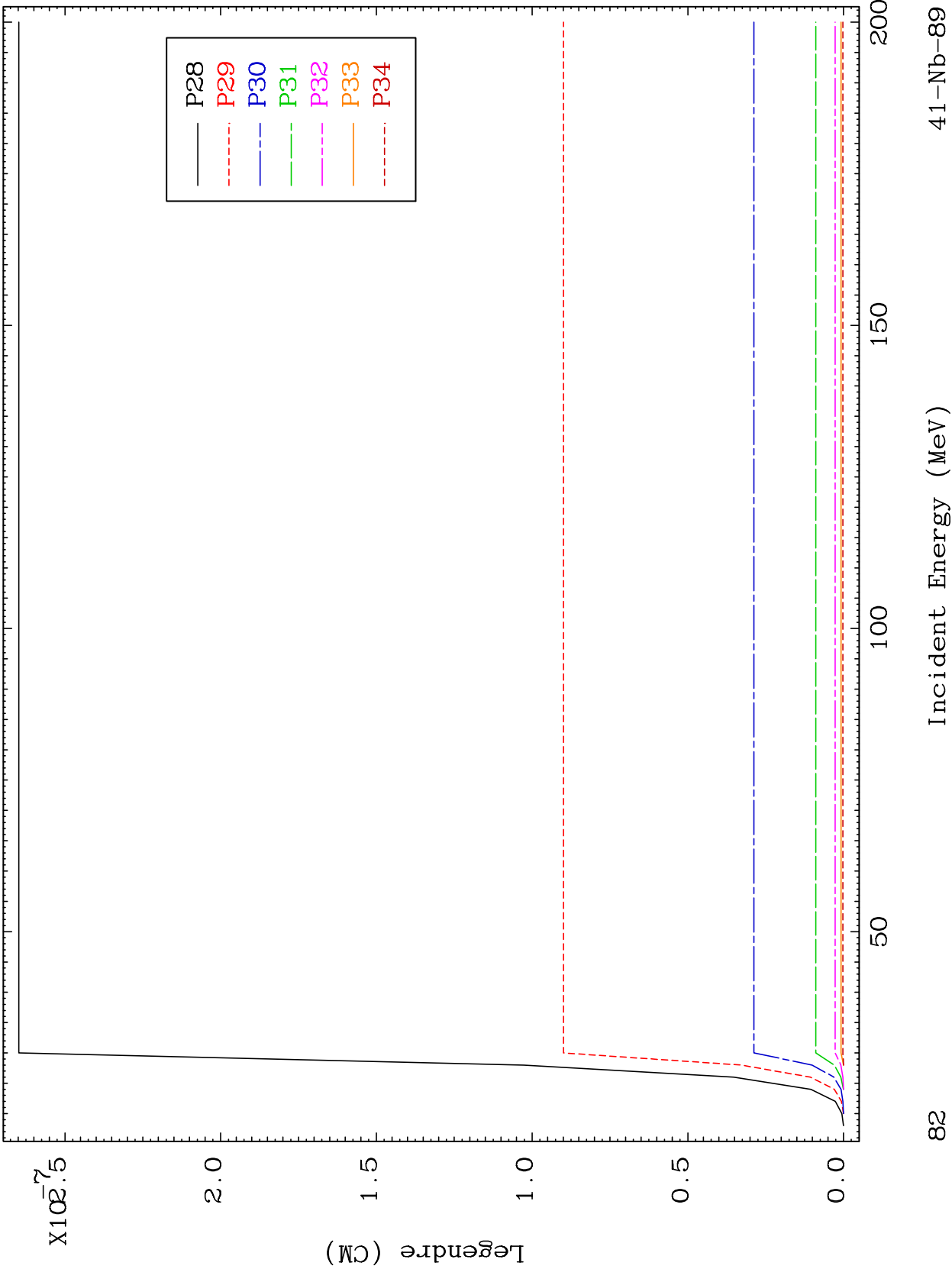
150

200

81

Incident Energy (MeV)

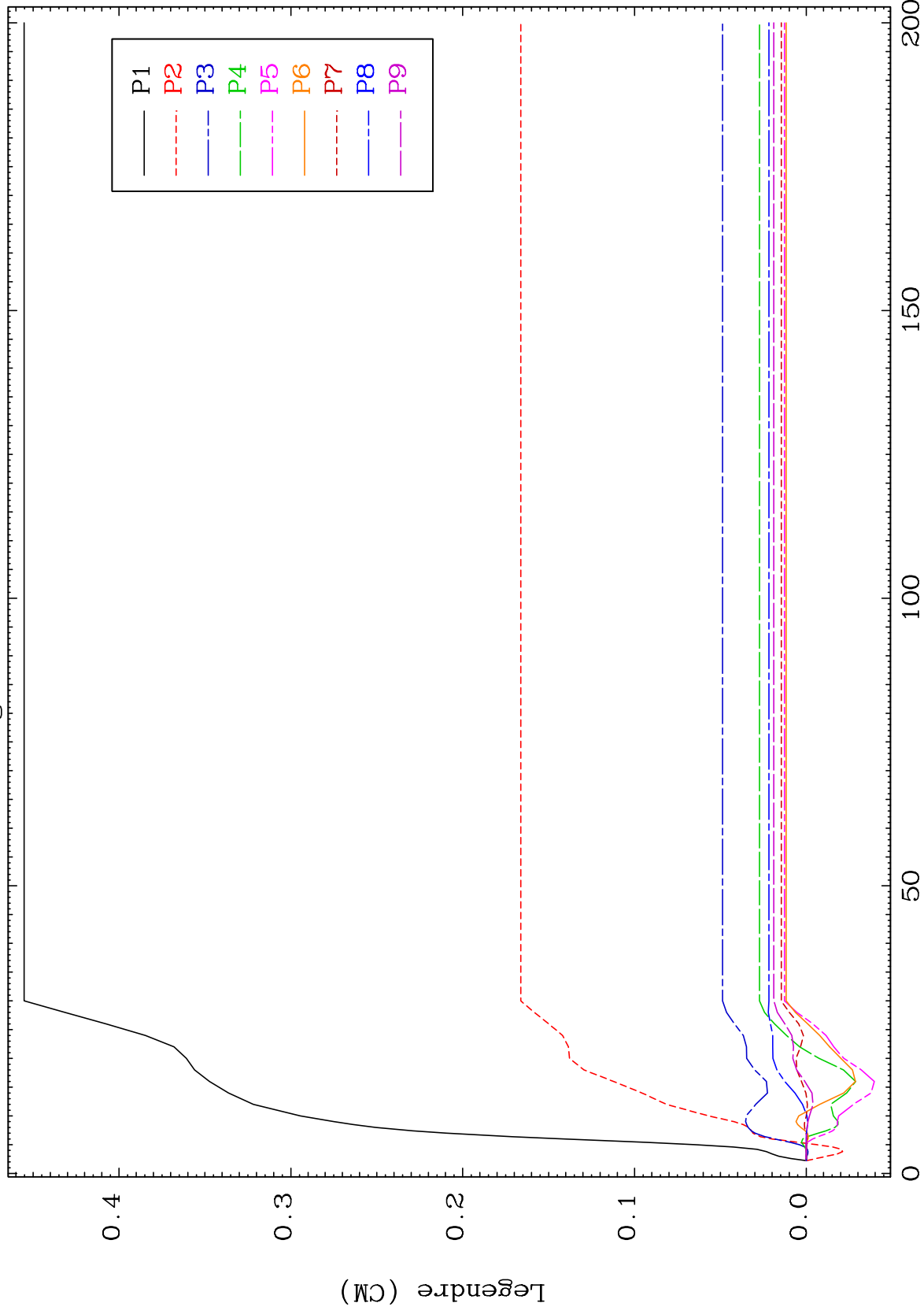
41-Nb-89



MAT 4113

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

41-Nb-89



83

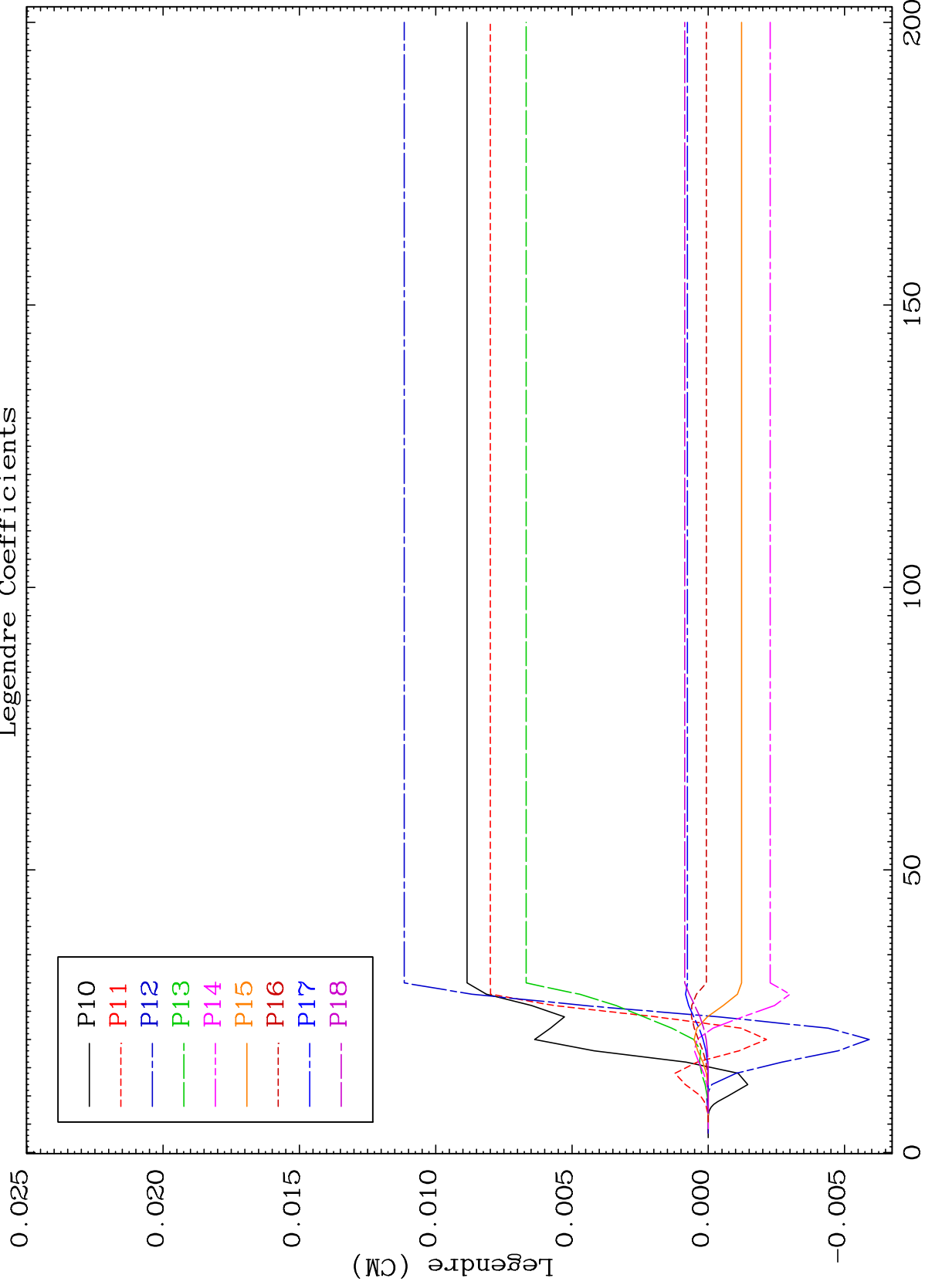
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



84

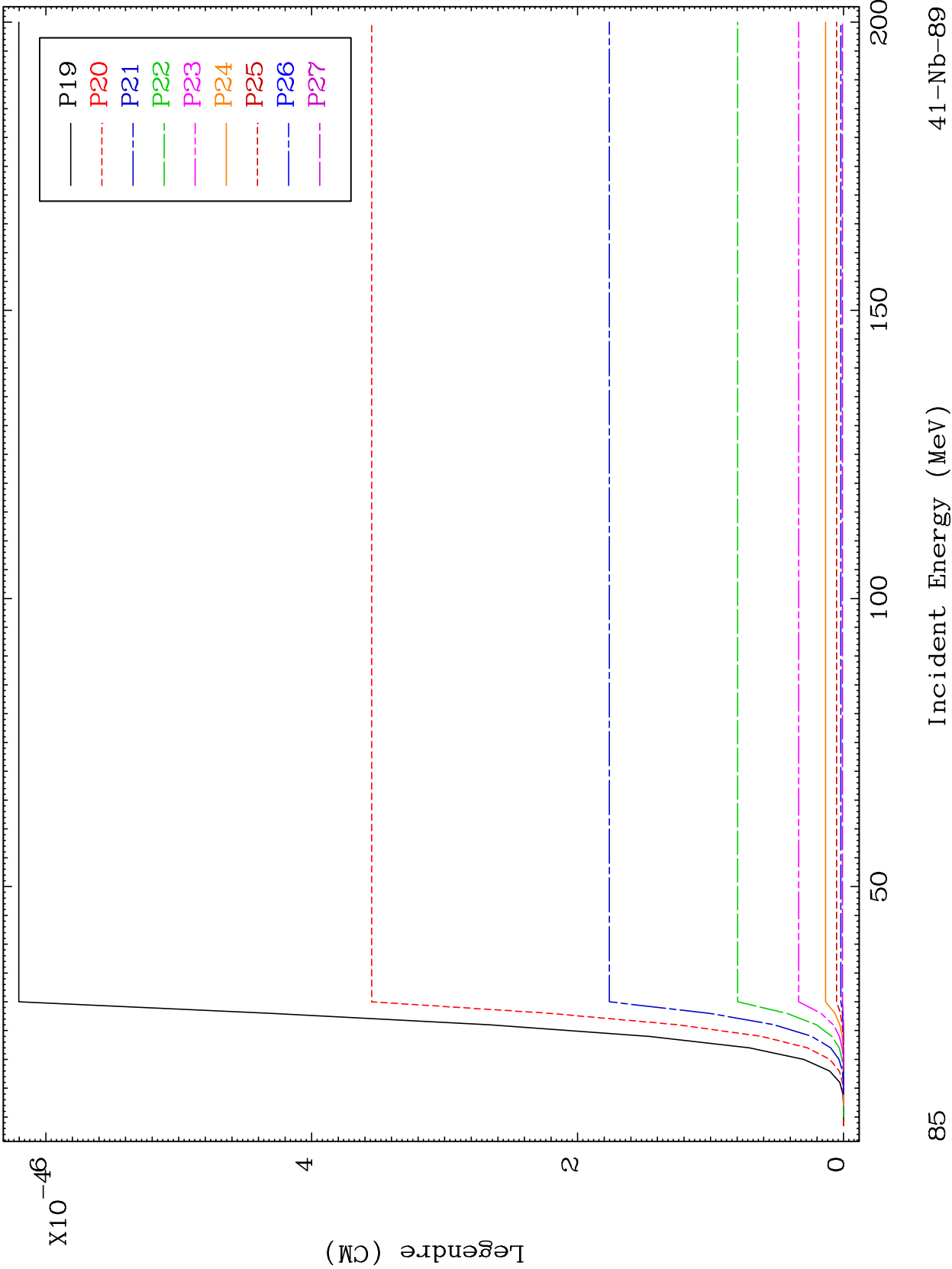
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

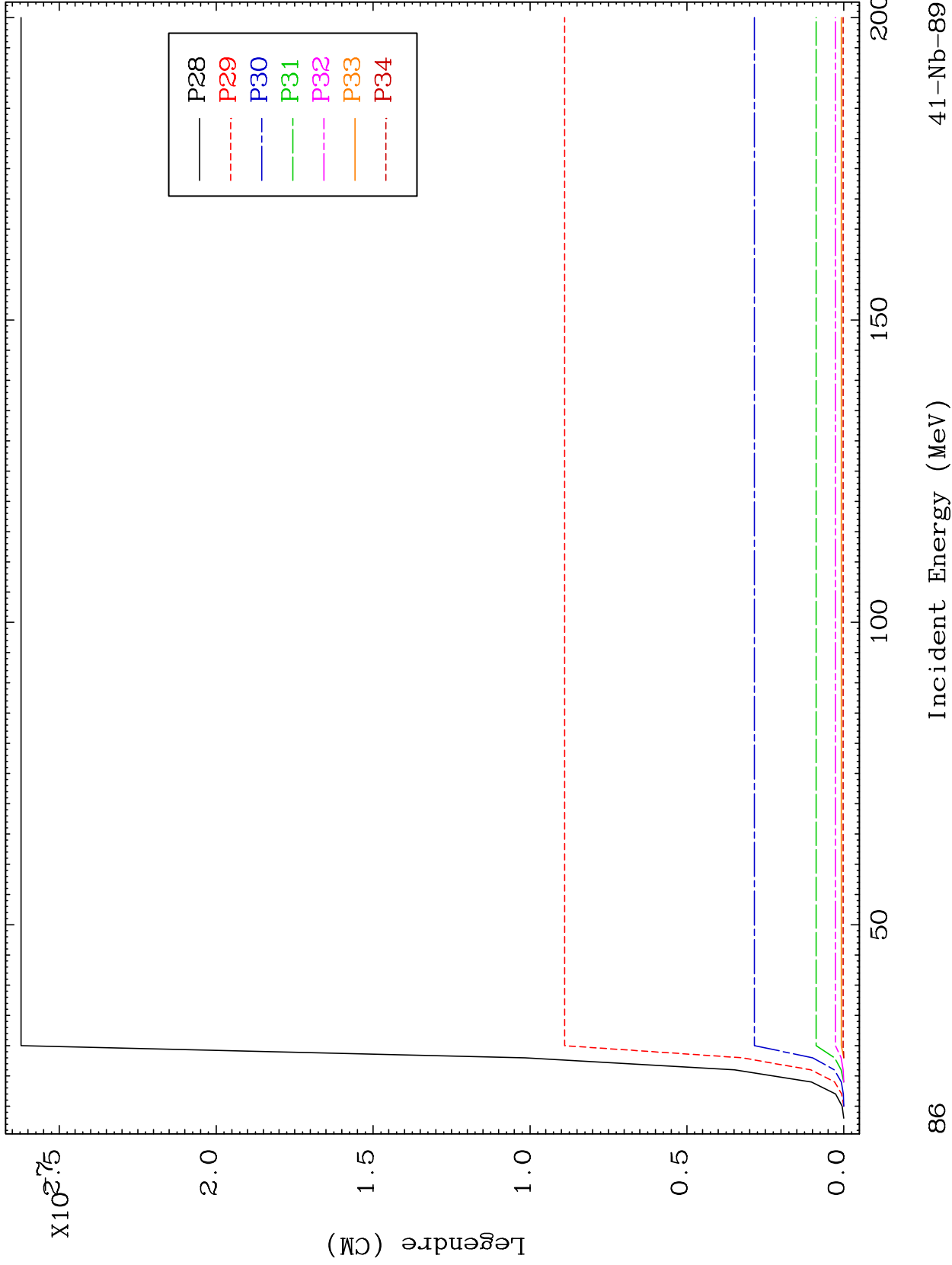
41-Nb-89



85

Incident Energy (MeV)

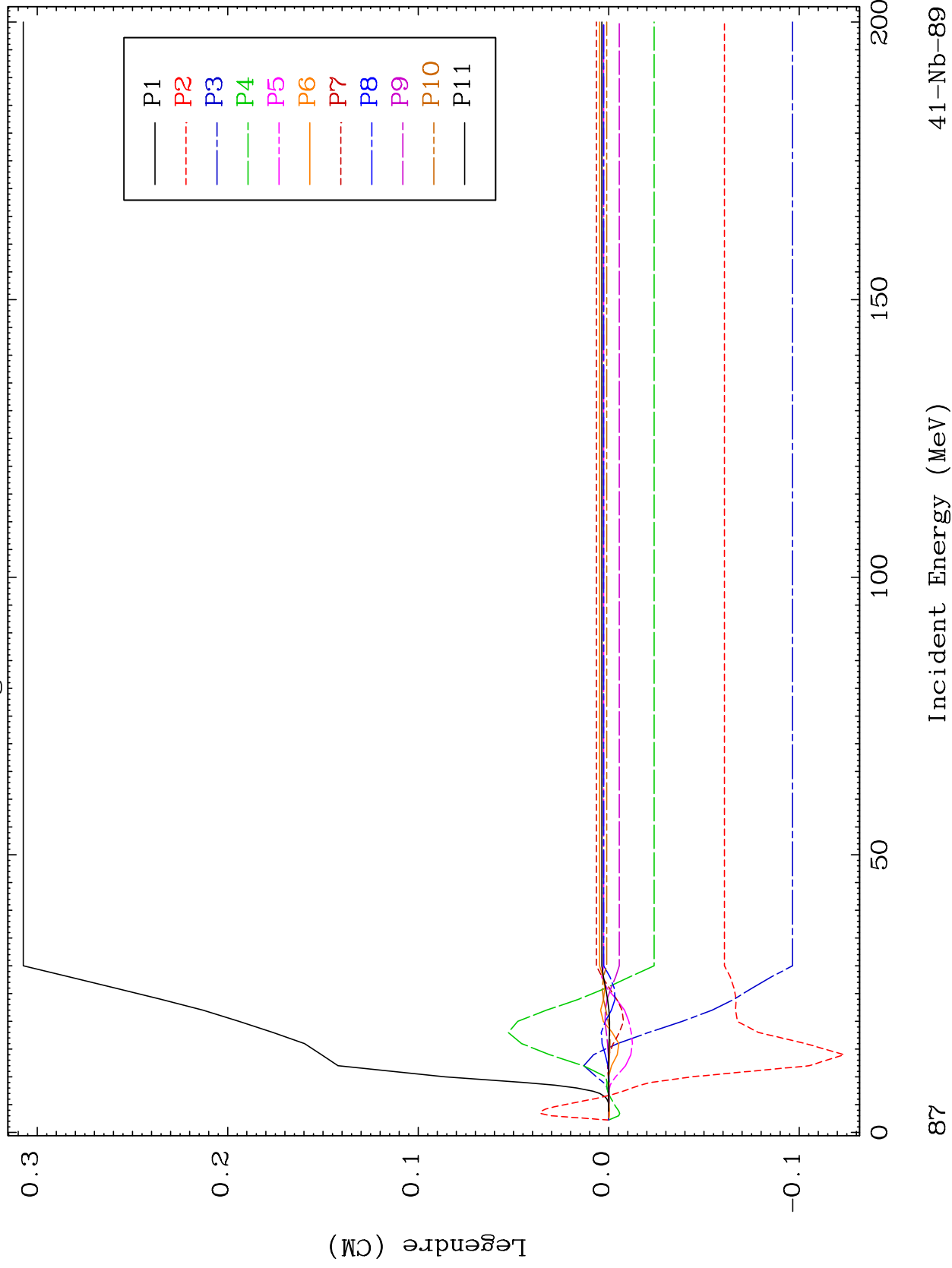
41-Nb-89



MAT 4113

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

41-Nb-89



41-Nb-89

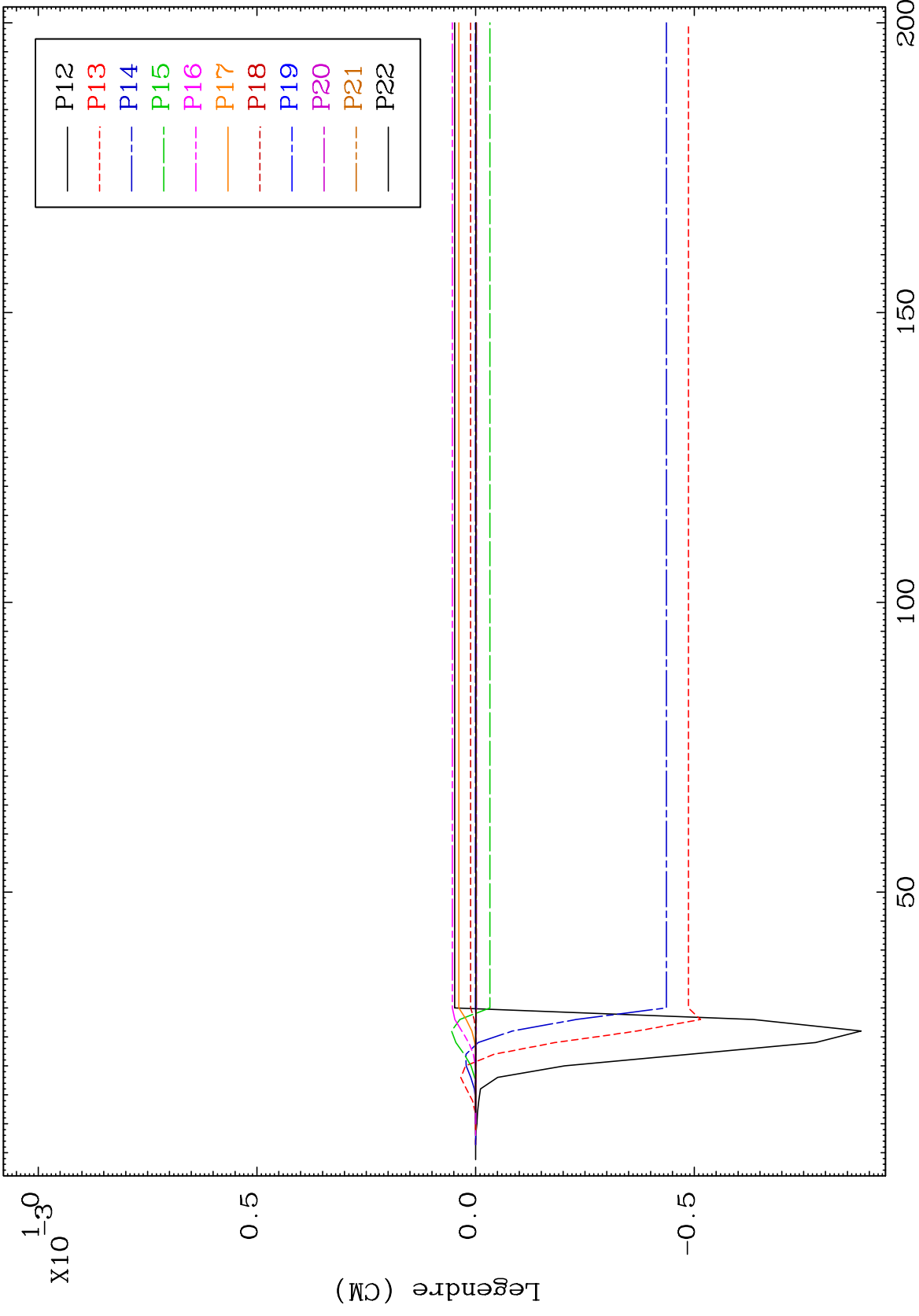
Incident Energy (MeV)

87

MAT 4113

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

41-Nb-89



88

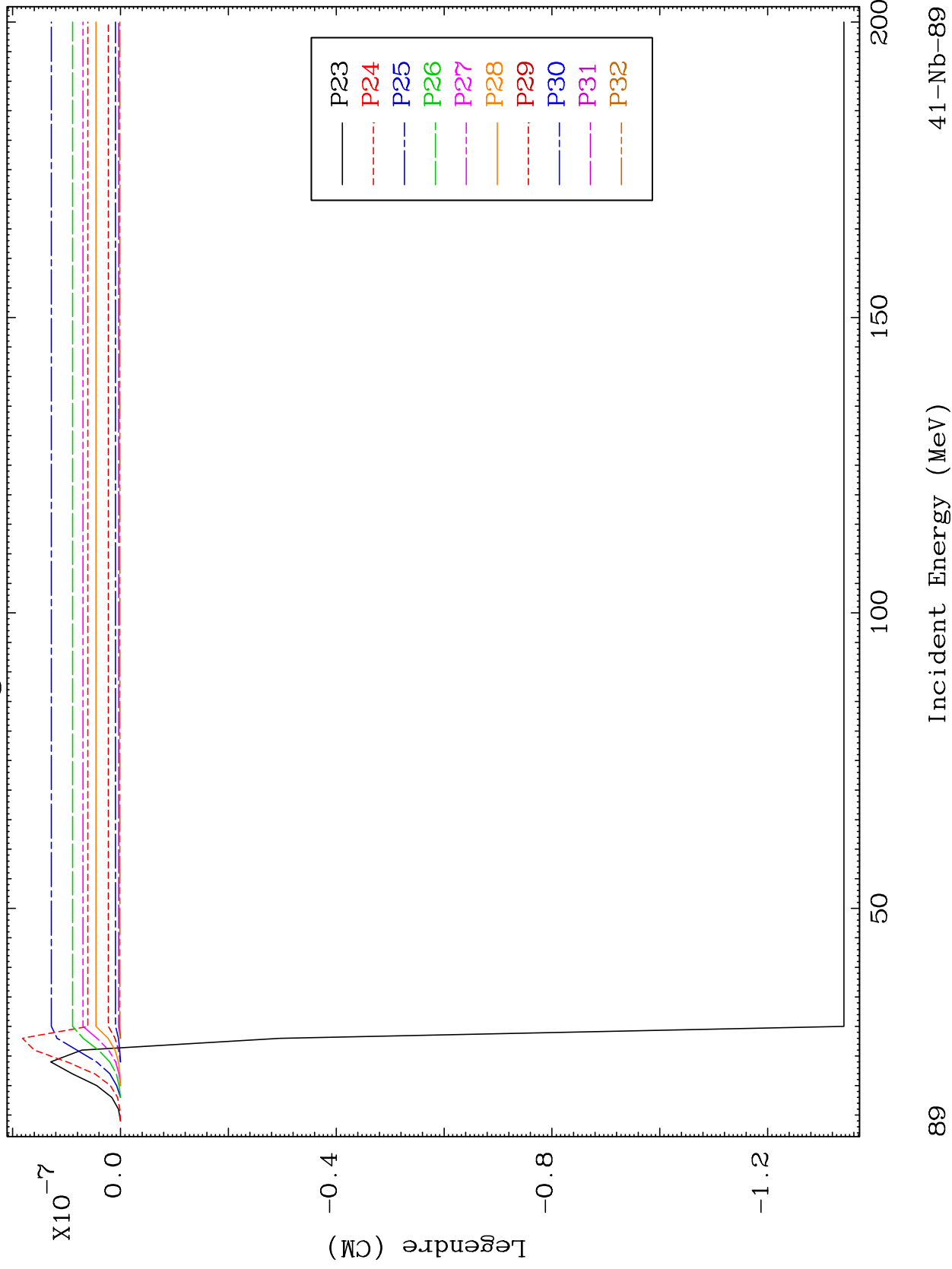
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



89

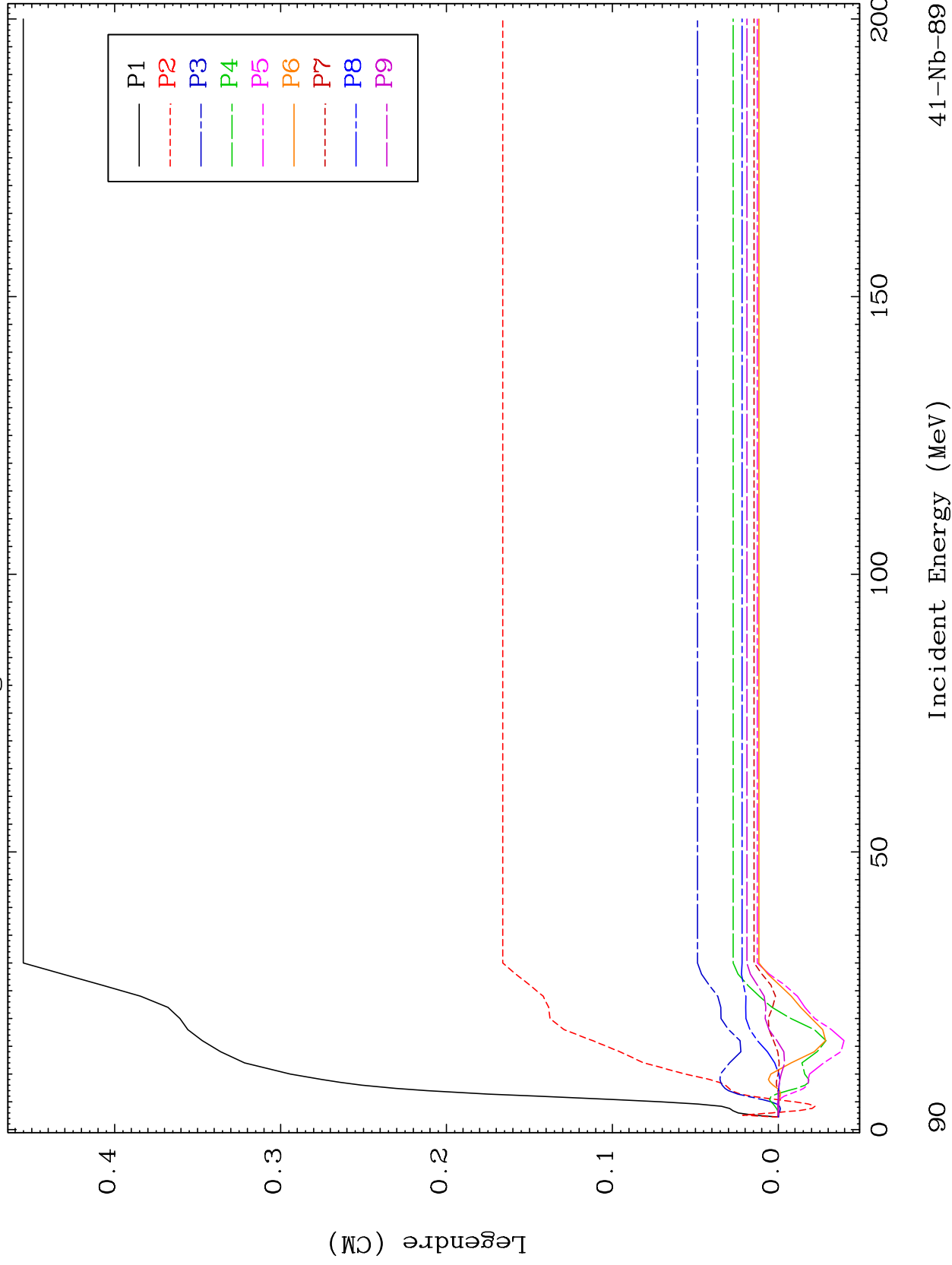
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



41-Nb-89

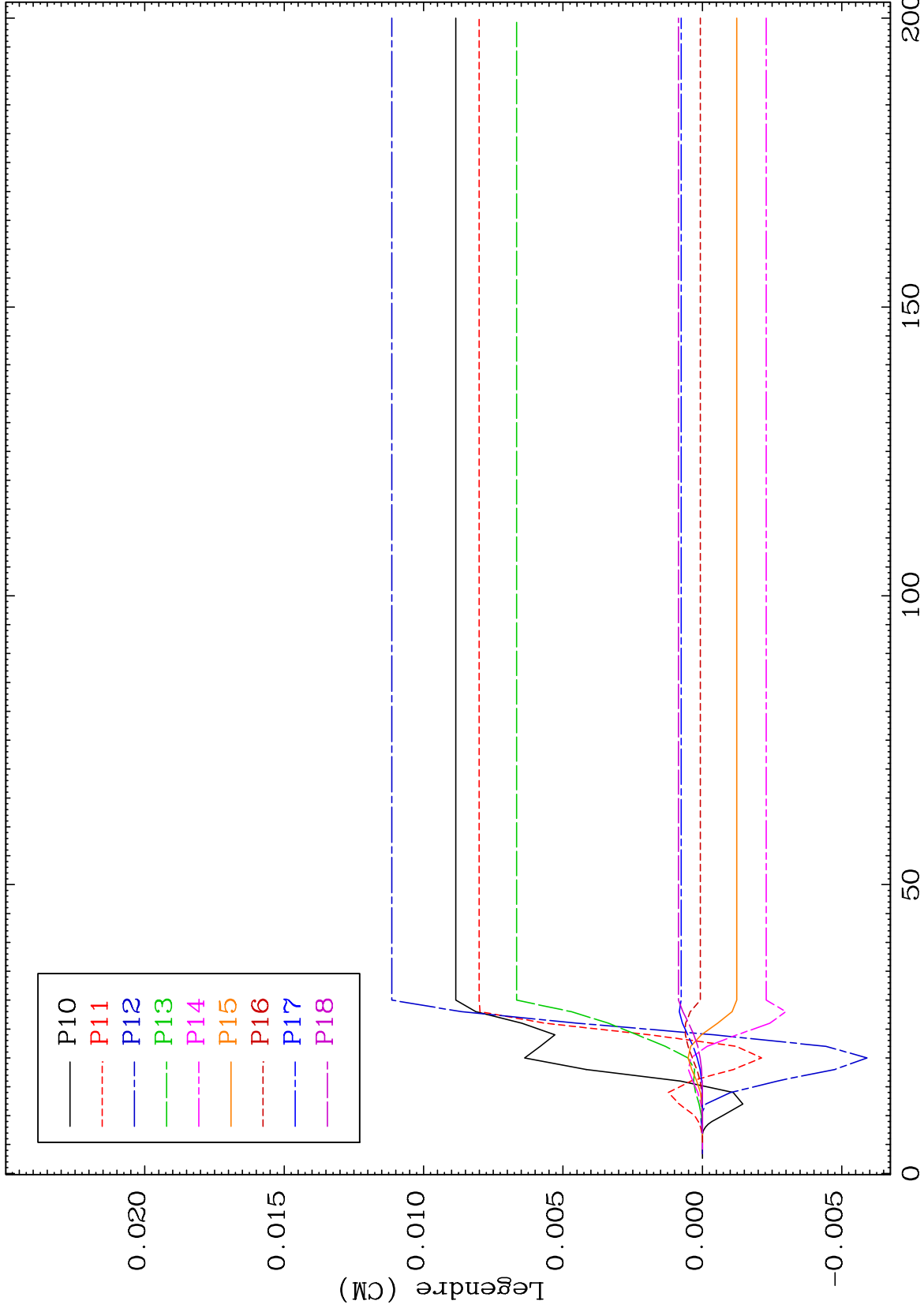
Incident Energy (MeV)

90

MAT 4113

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

41-Nb-89



91

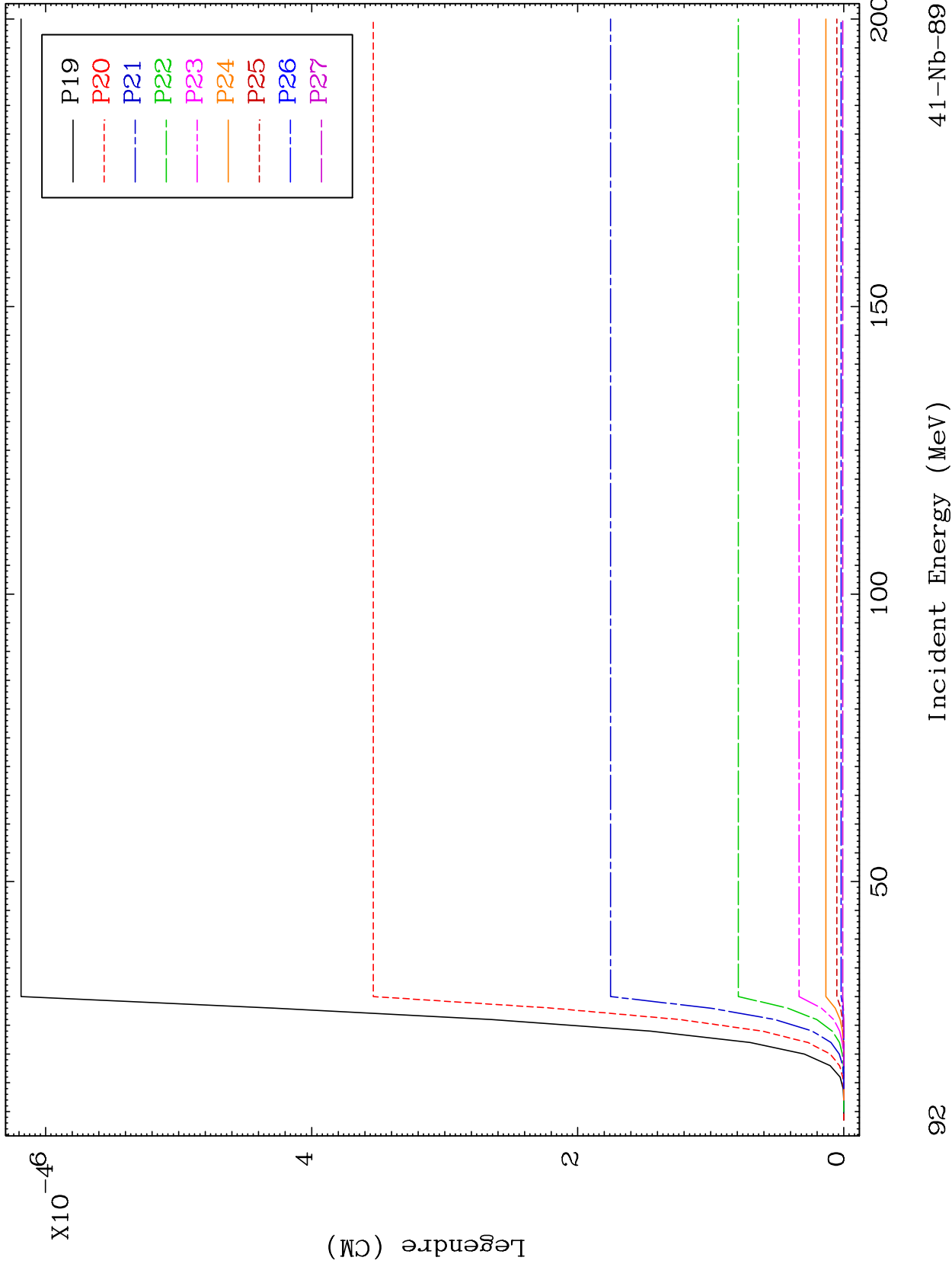
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

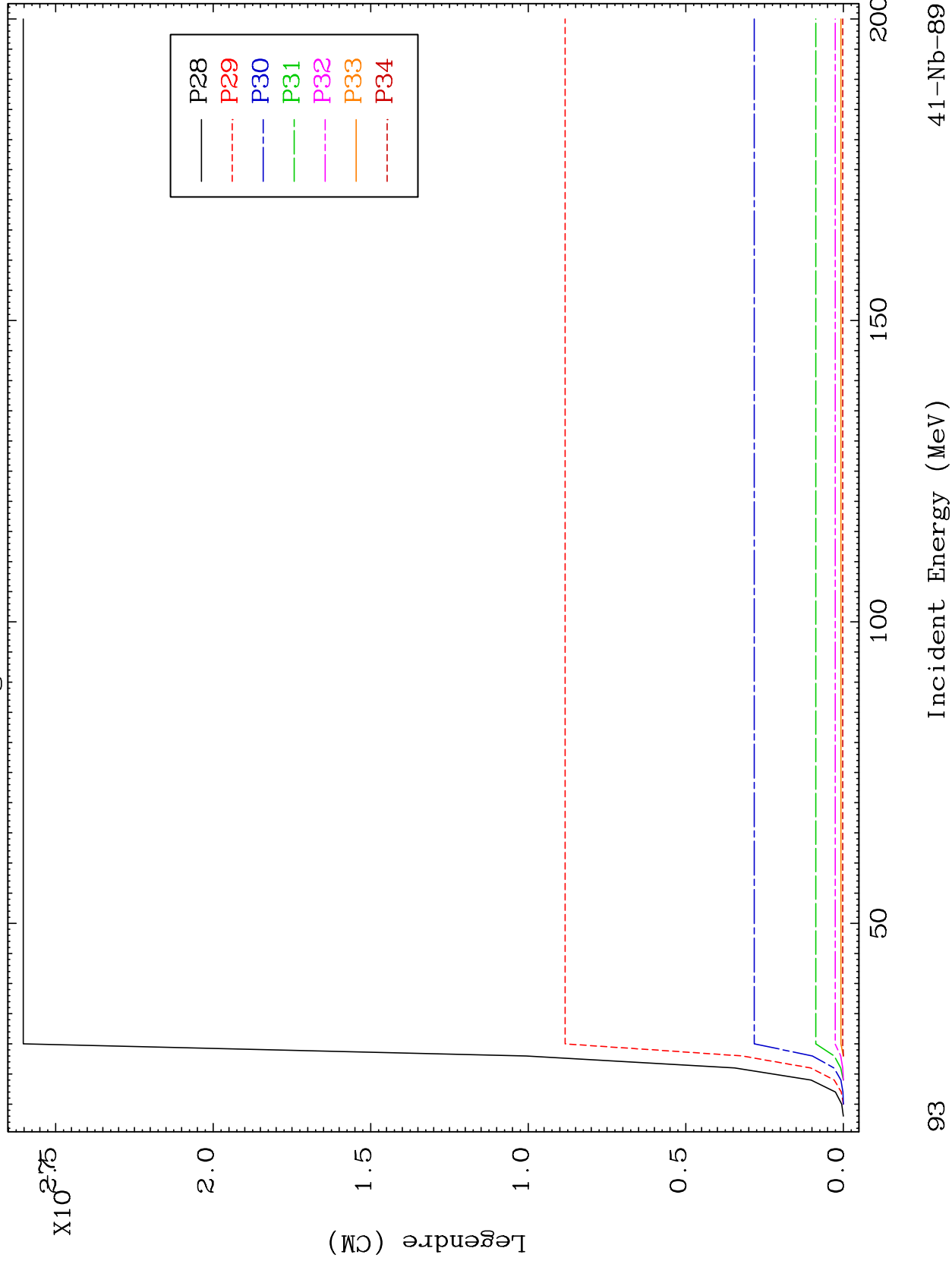
41-Nb-89



MAT 4113

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

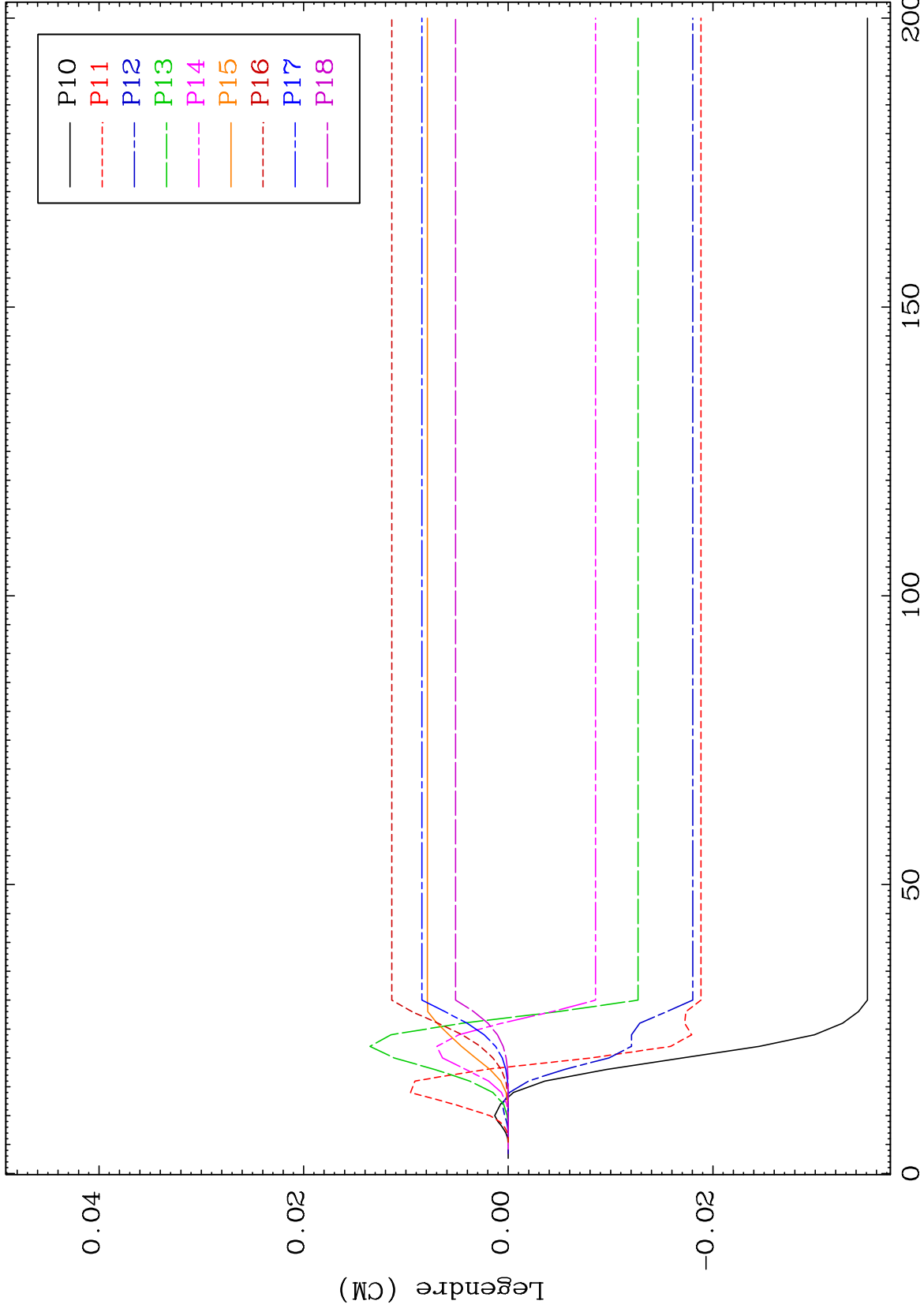
41-Nb-89



MAT 4113

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

41-Nb-89



95

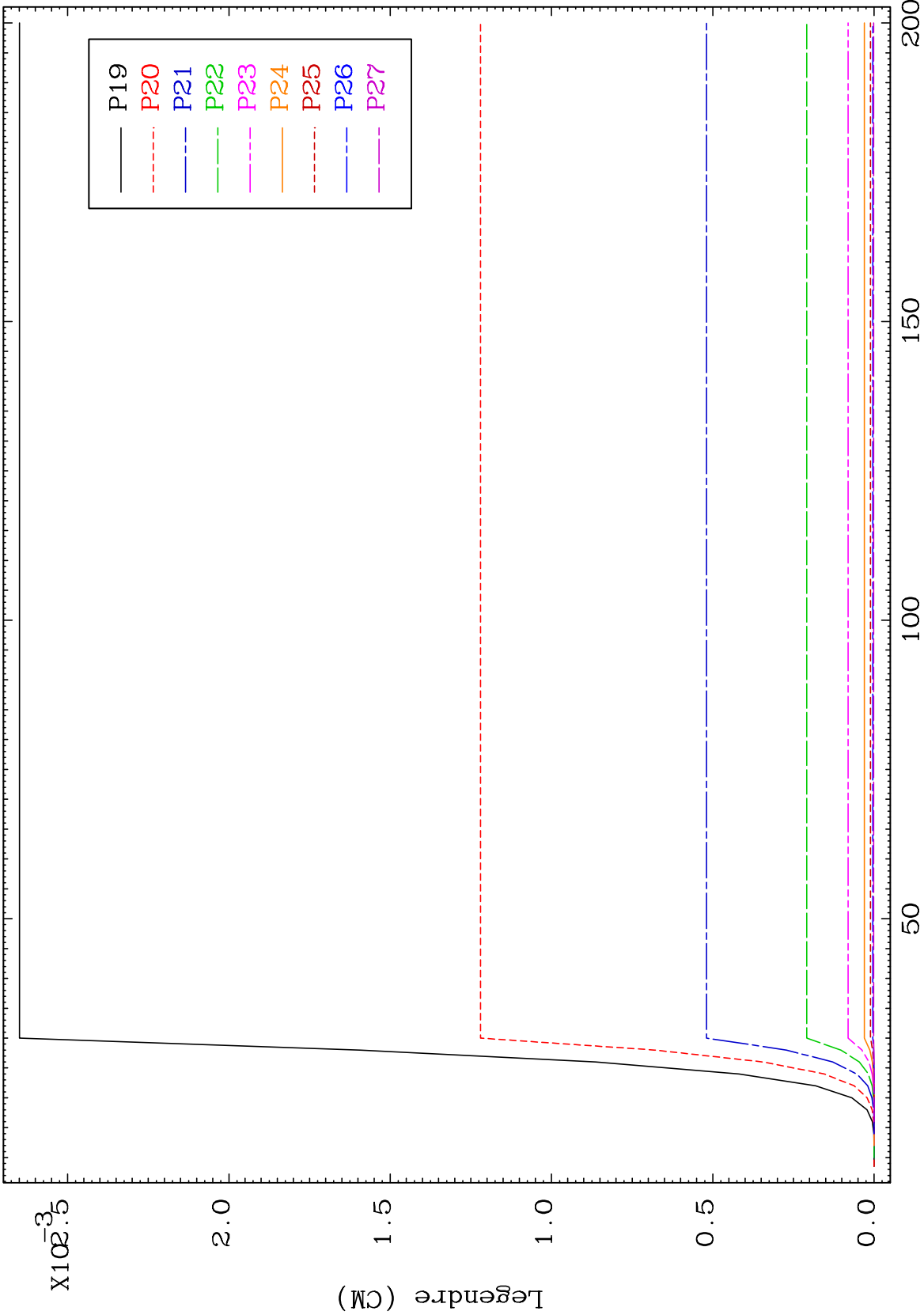
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



96

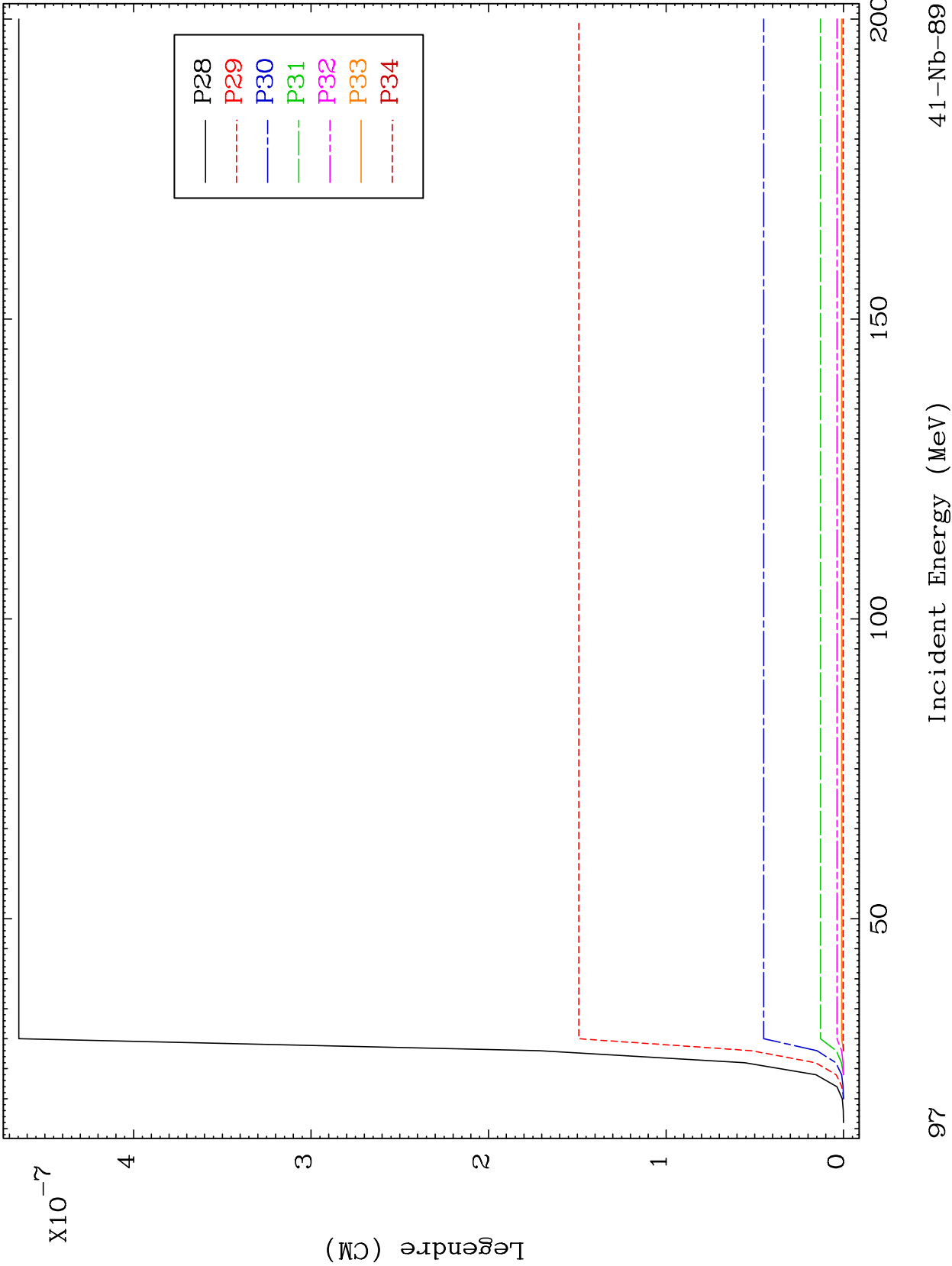
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

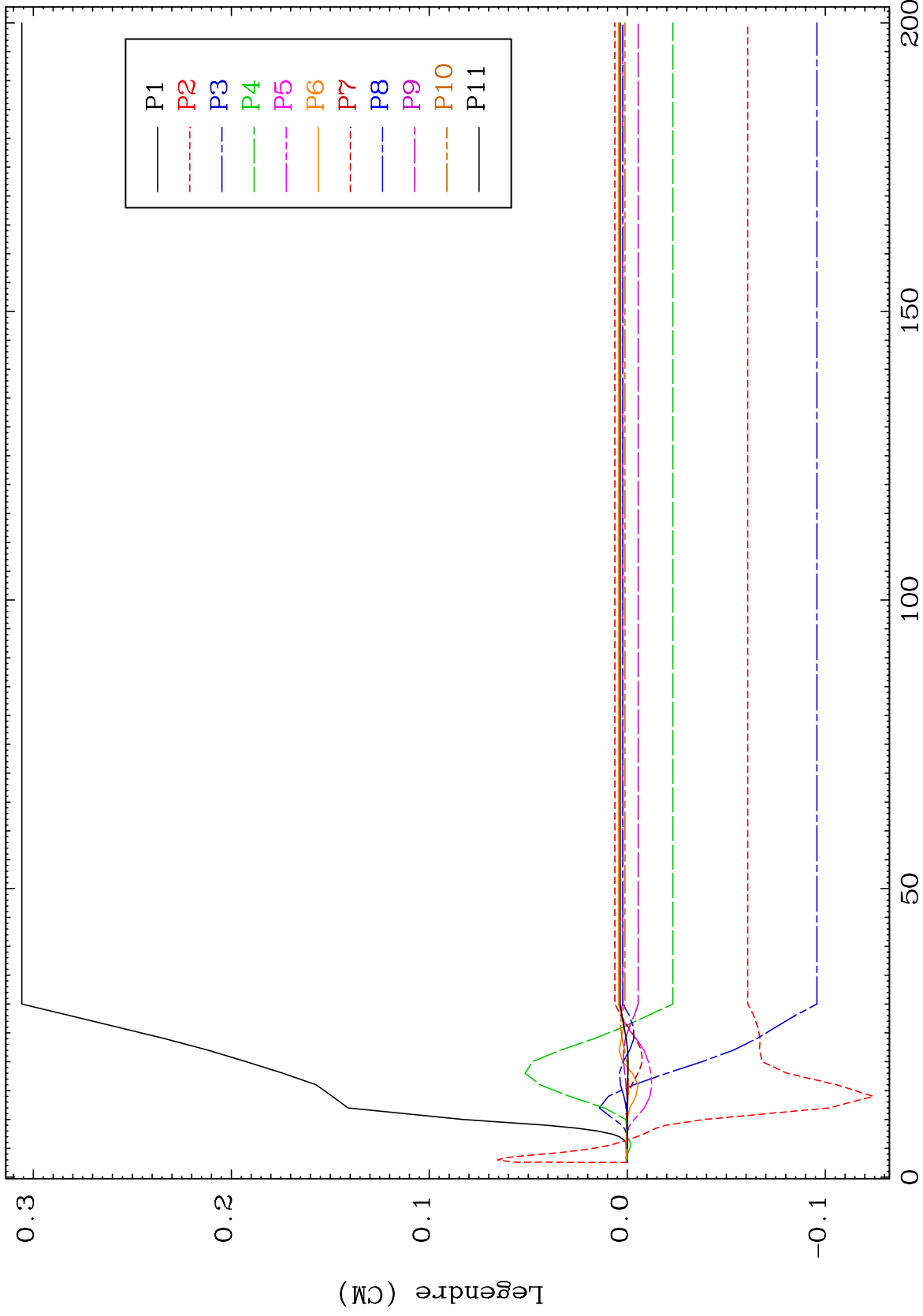
41-Nb-89



MAT 4113

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

41-Nb-89



98

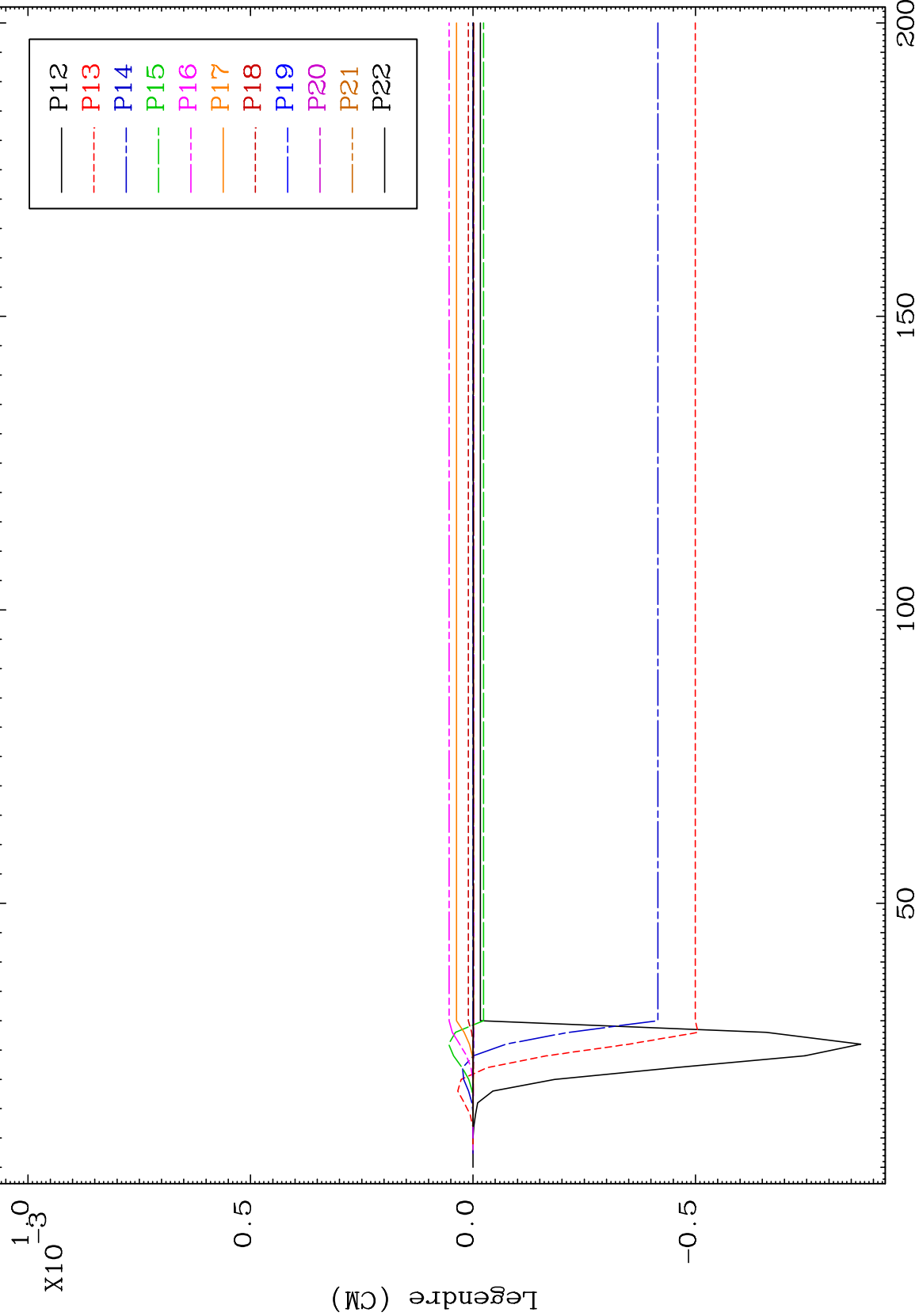
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



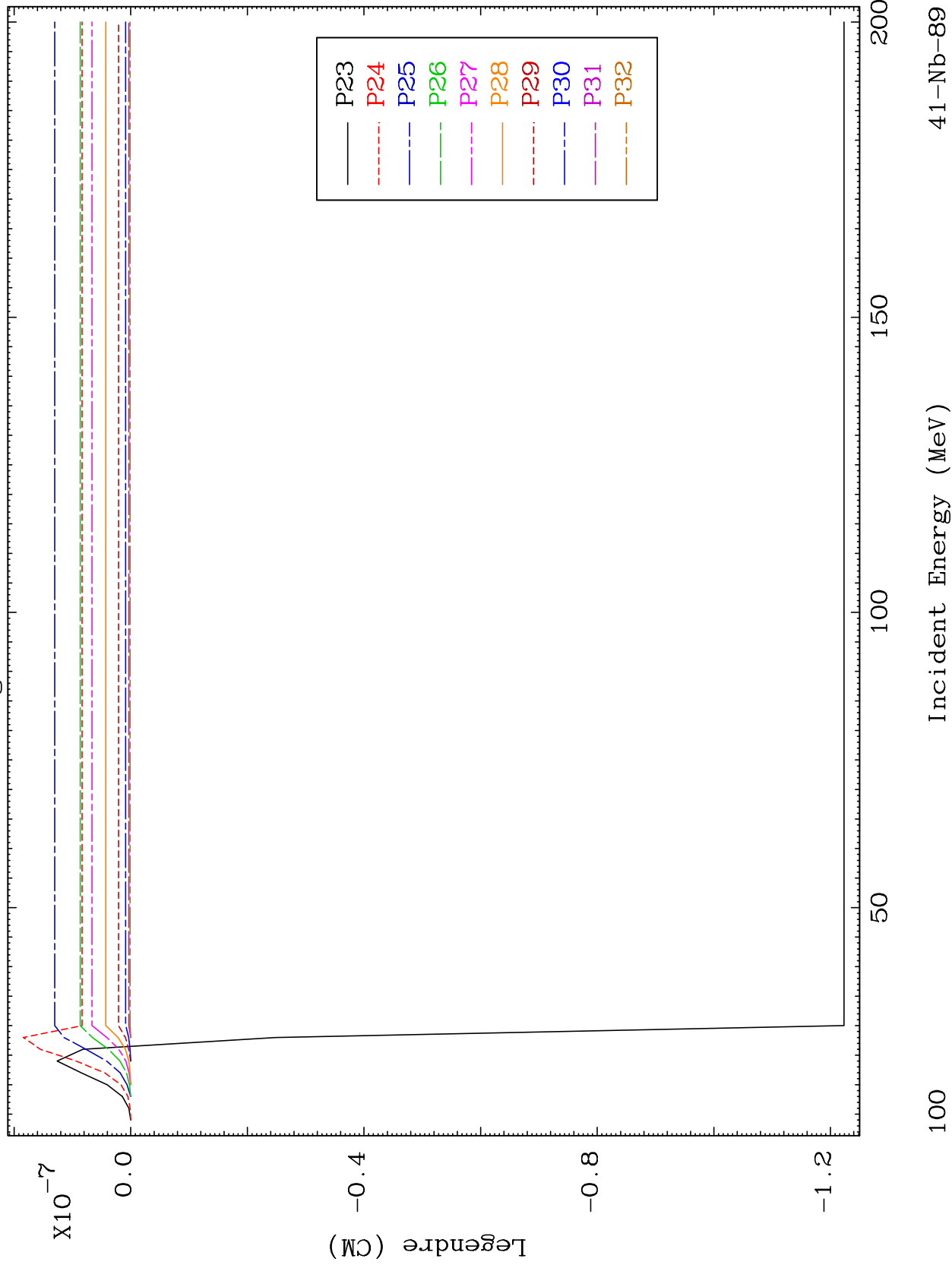
99

41-Nb-89

MAT 4113

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

41-Nb-89



100

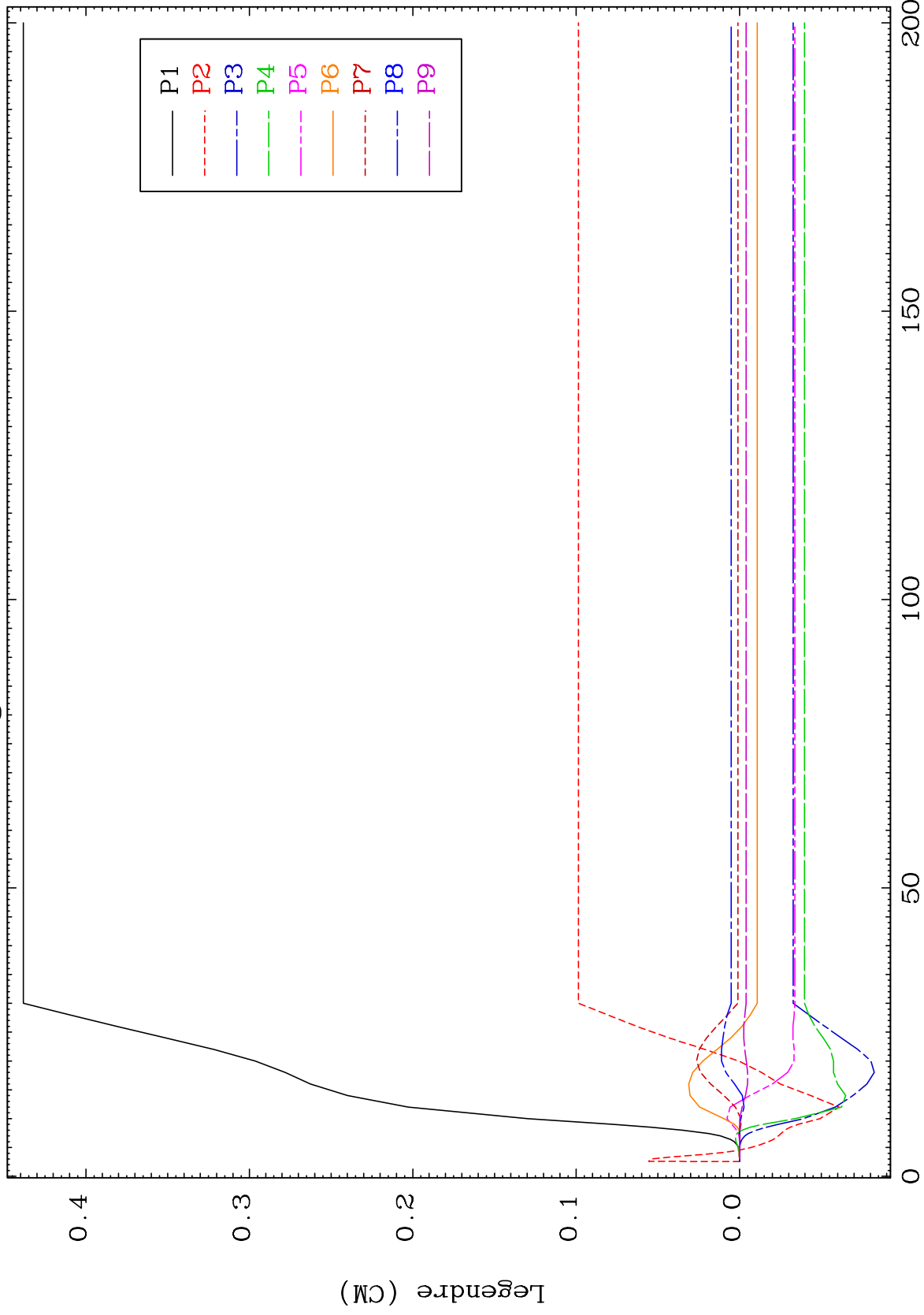
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



101

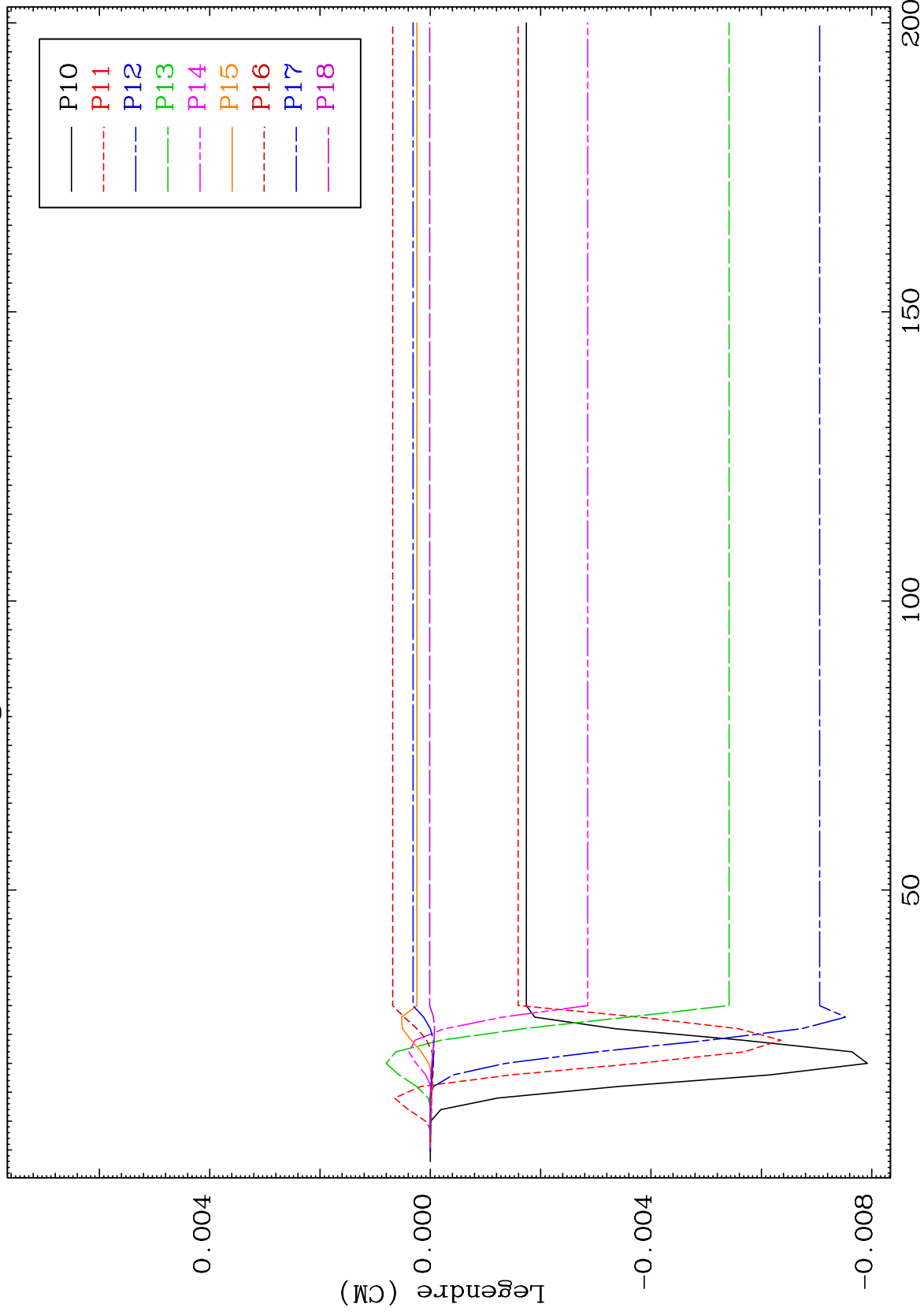
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



102

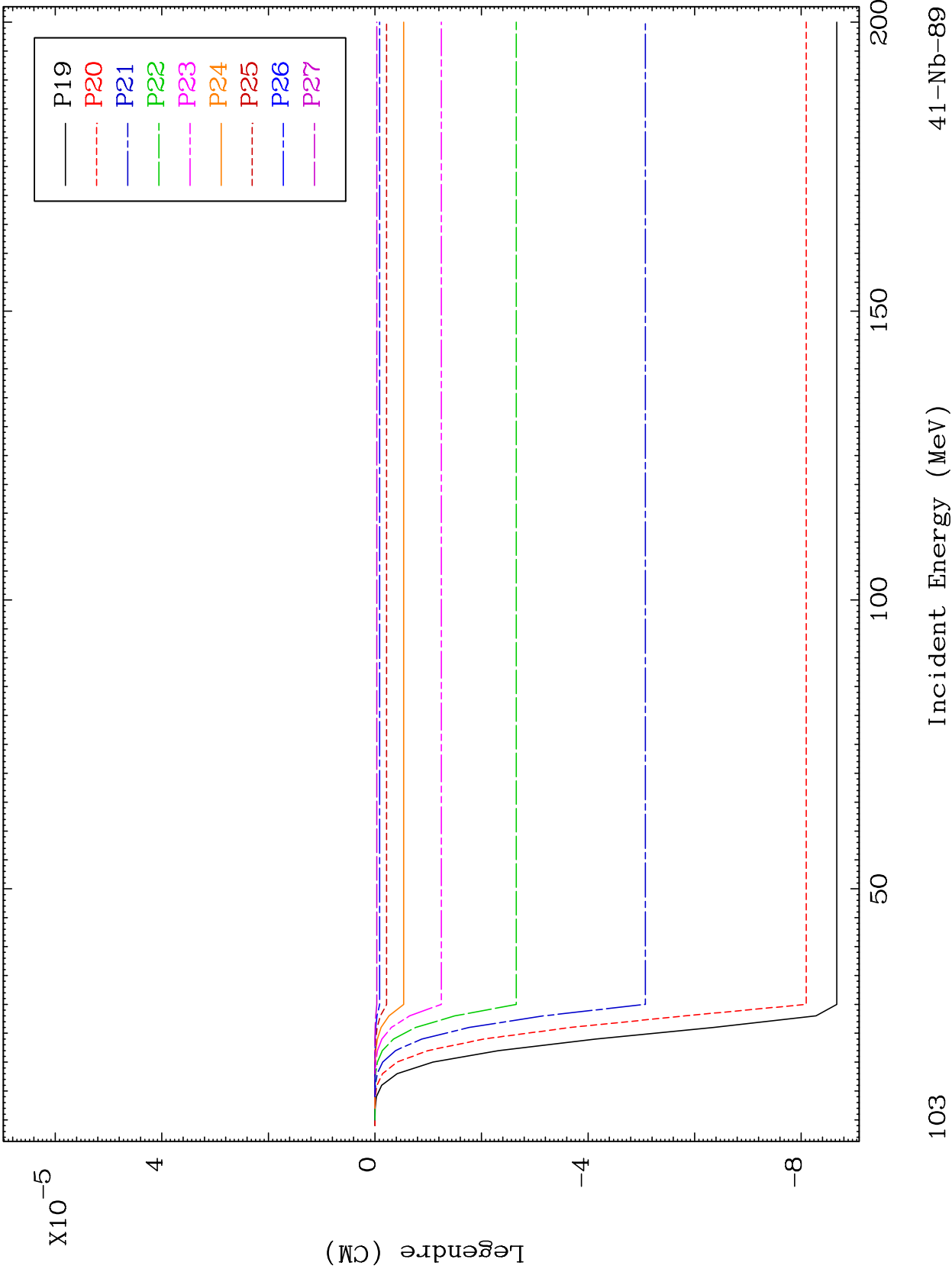
Incident Energy (MeV)

41-Nb-89

MAT 4113

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

41-Nb-89



103

Incident Energy (MeV)

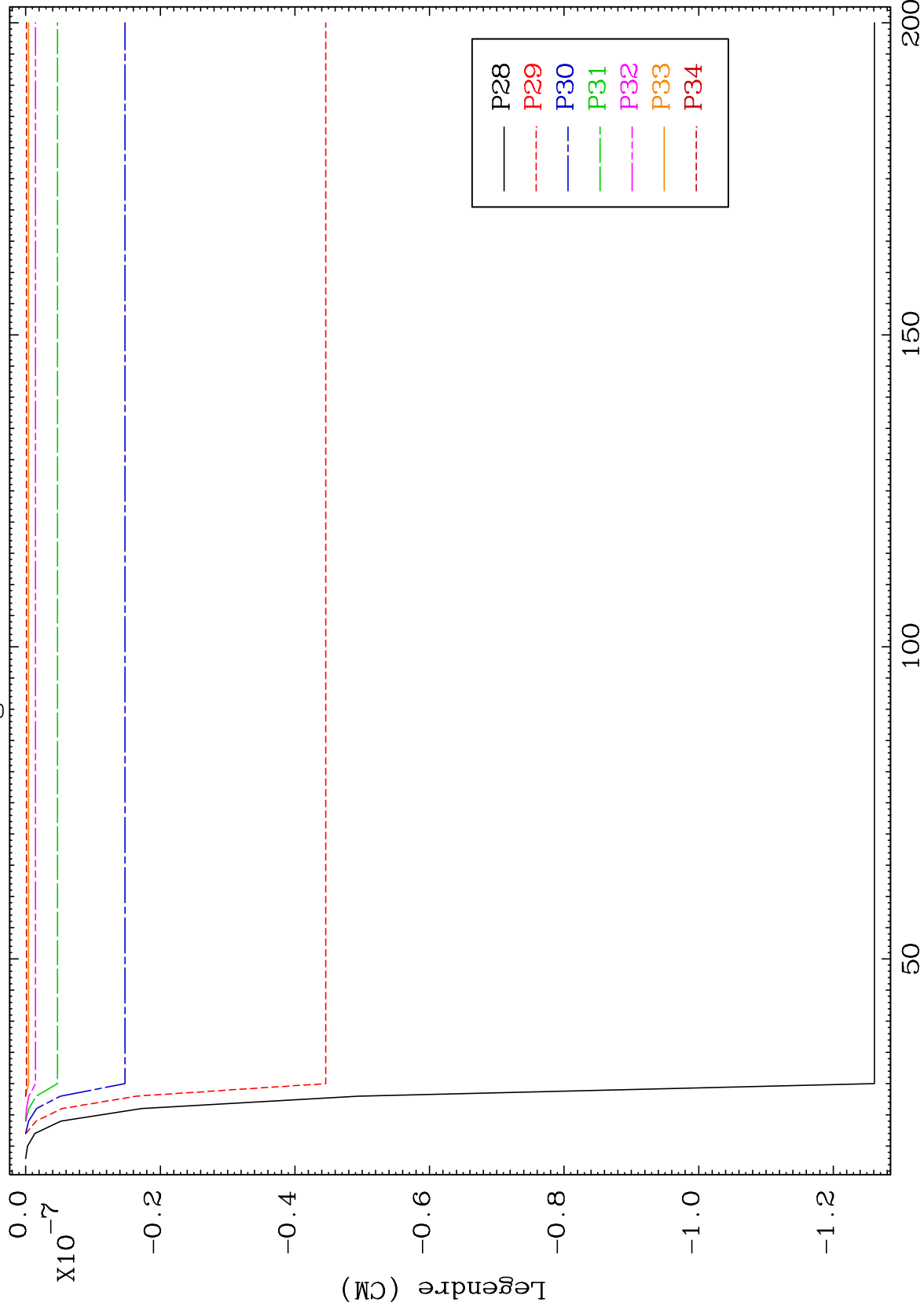
41-Nb-89

MAT 4113

MT= 72 (n,n') Level

41-Nb-89

Legendre Coefficients



104

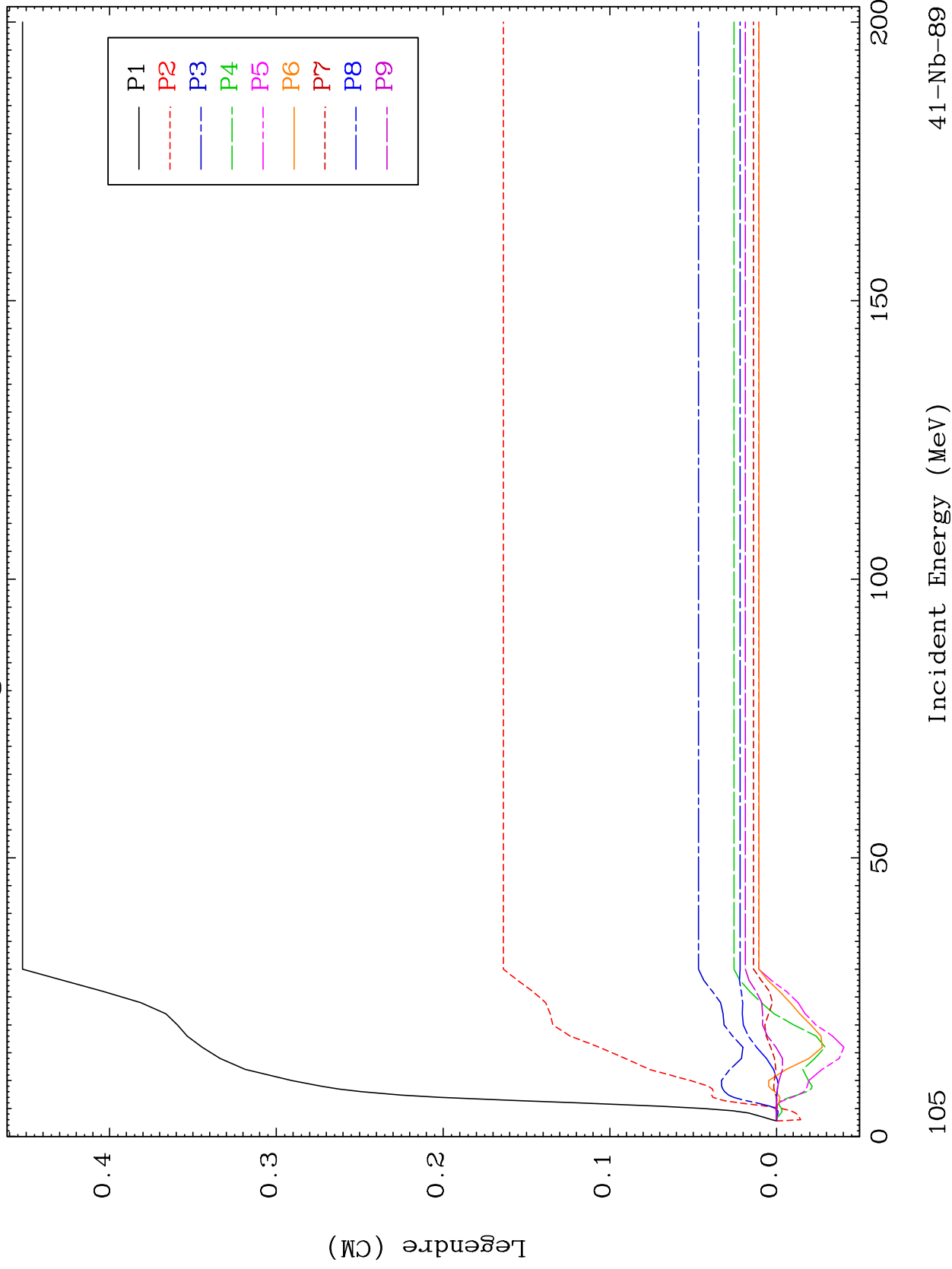
Incident Energy (MeV)

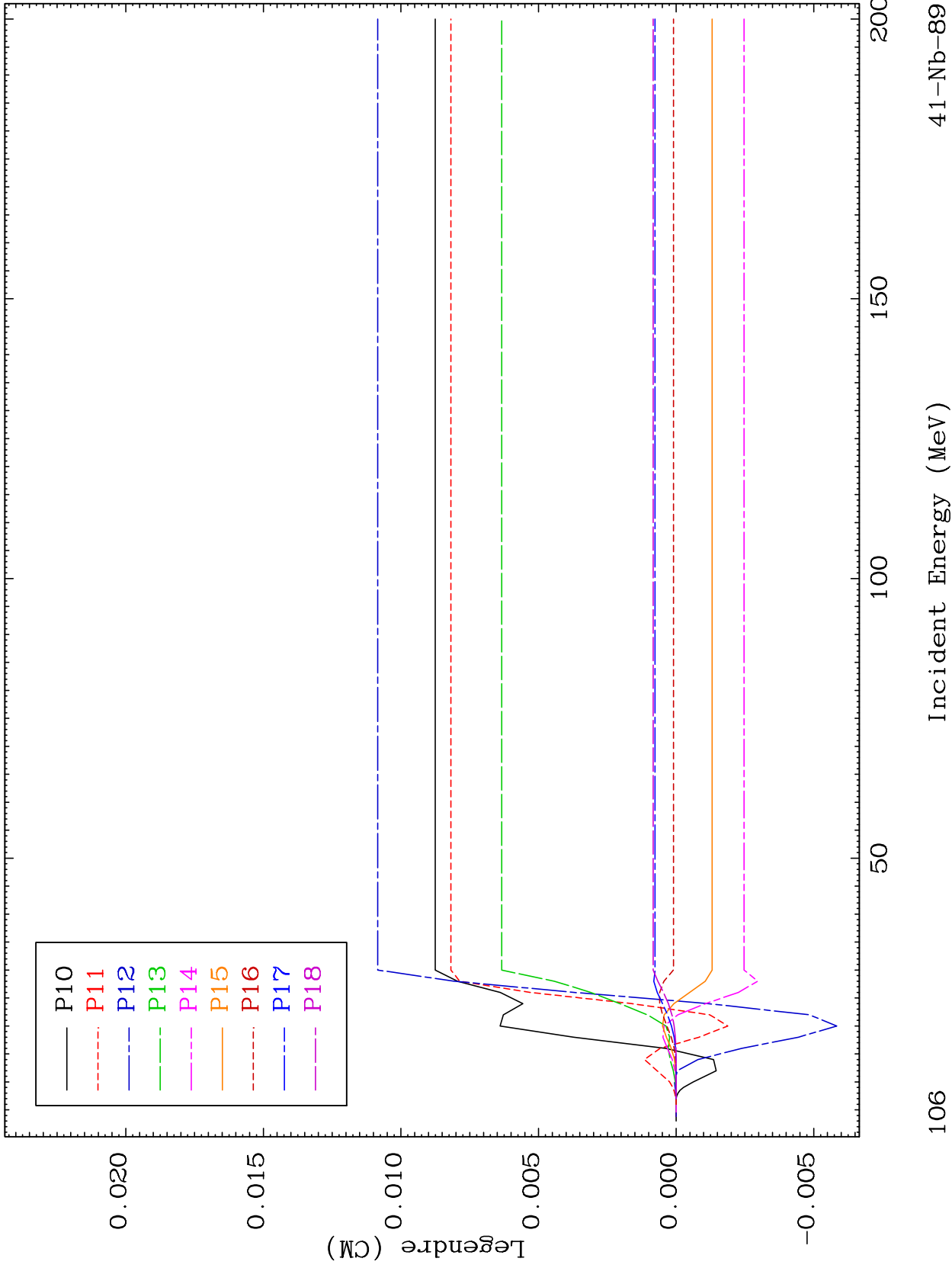
41-Nb-89

MAT 4113

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

41-Nb-89

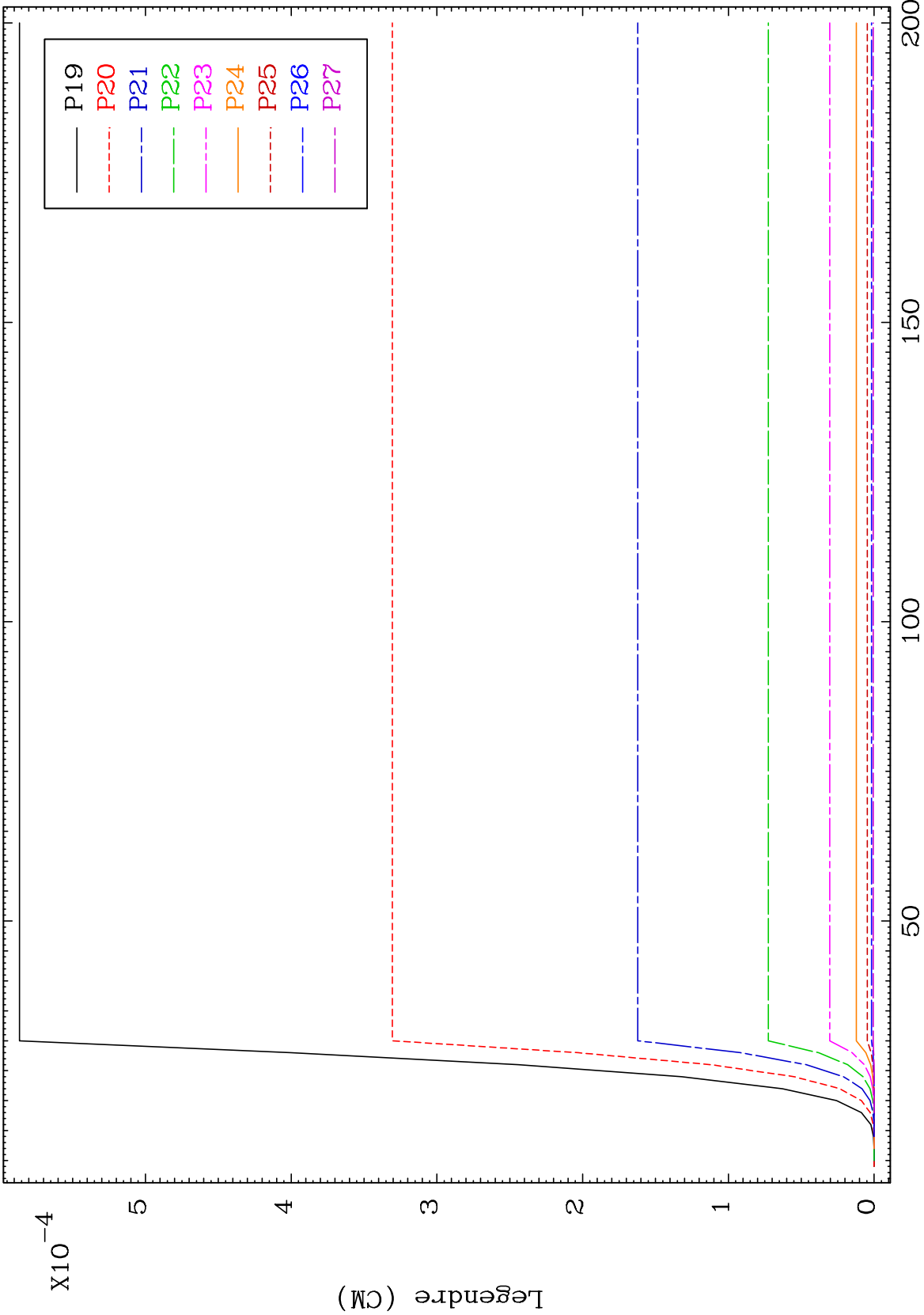




MAT 4113

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

41-Nb-89



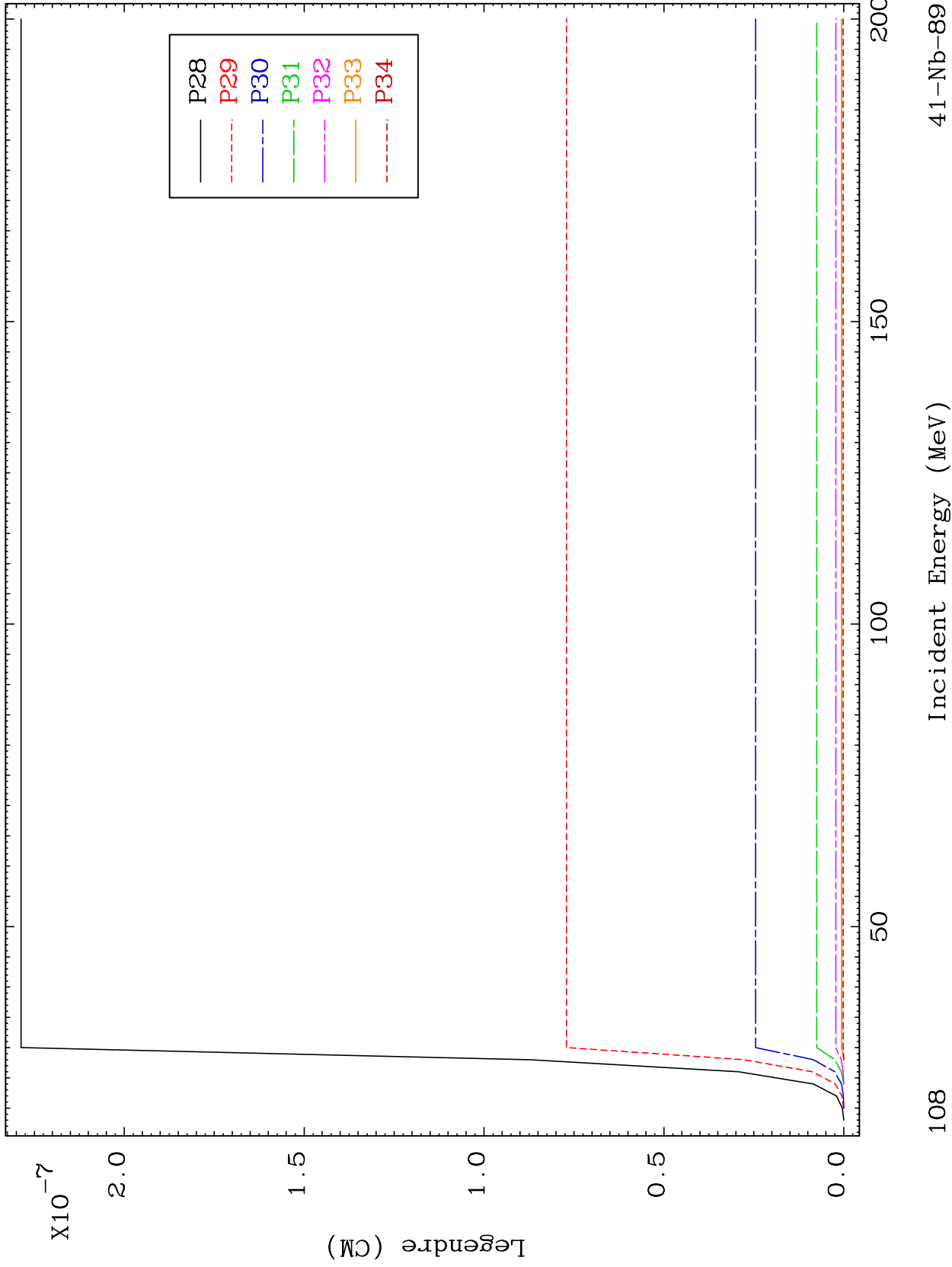
107

41-Nb-89

MAT 4113

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

41-Nb-89



108

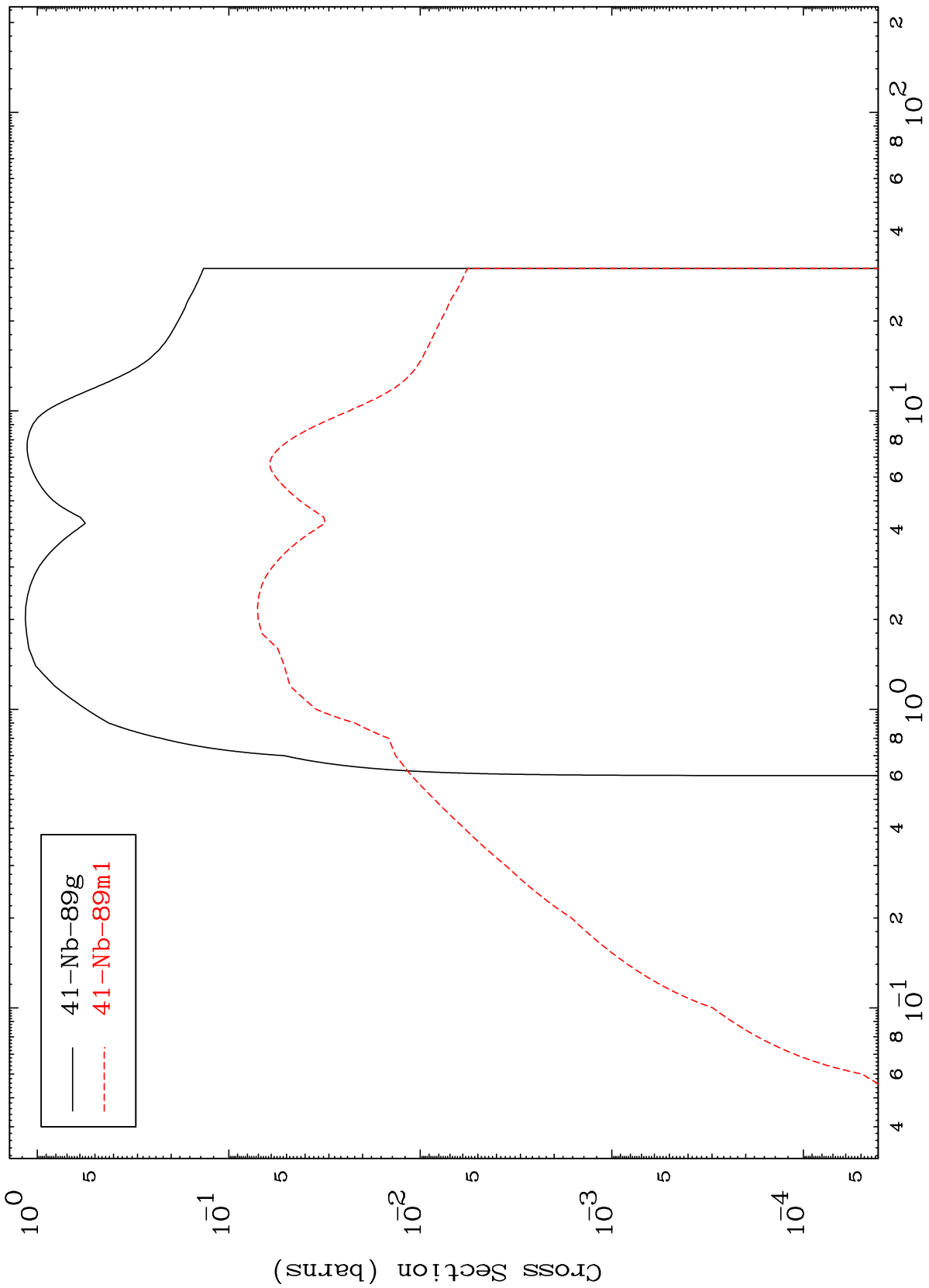
Incident Energy (MeV)

41-Nb-89

MAT 4113

41-Nb-89

Inelastic
Radionuclide Production Cross Section



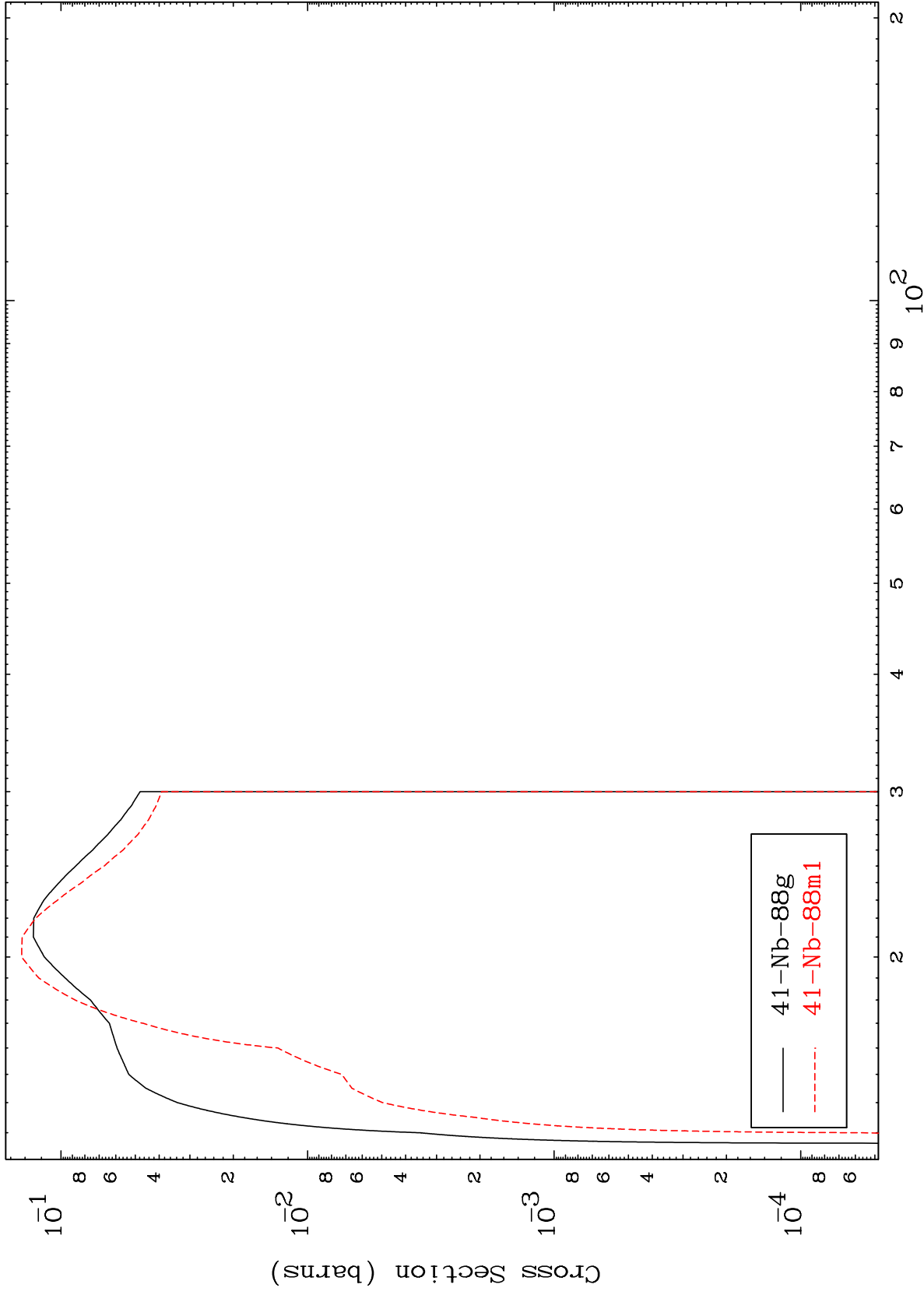
109

41-Nb-89

MAT 4113

41-Nb-89

(n,2n)
Radionuclide Production Cross Section



110

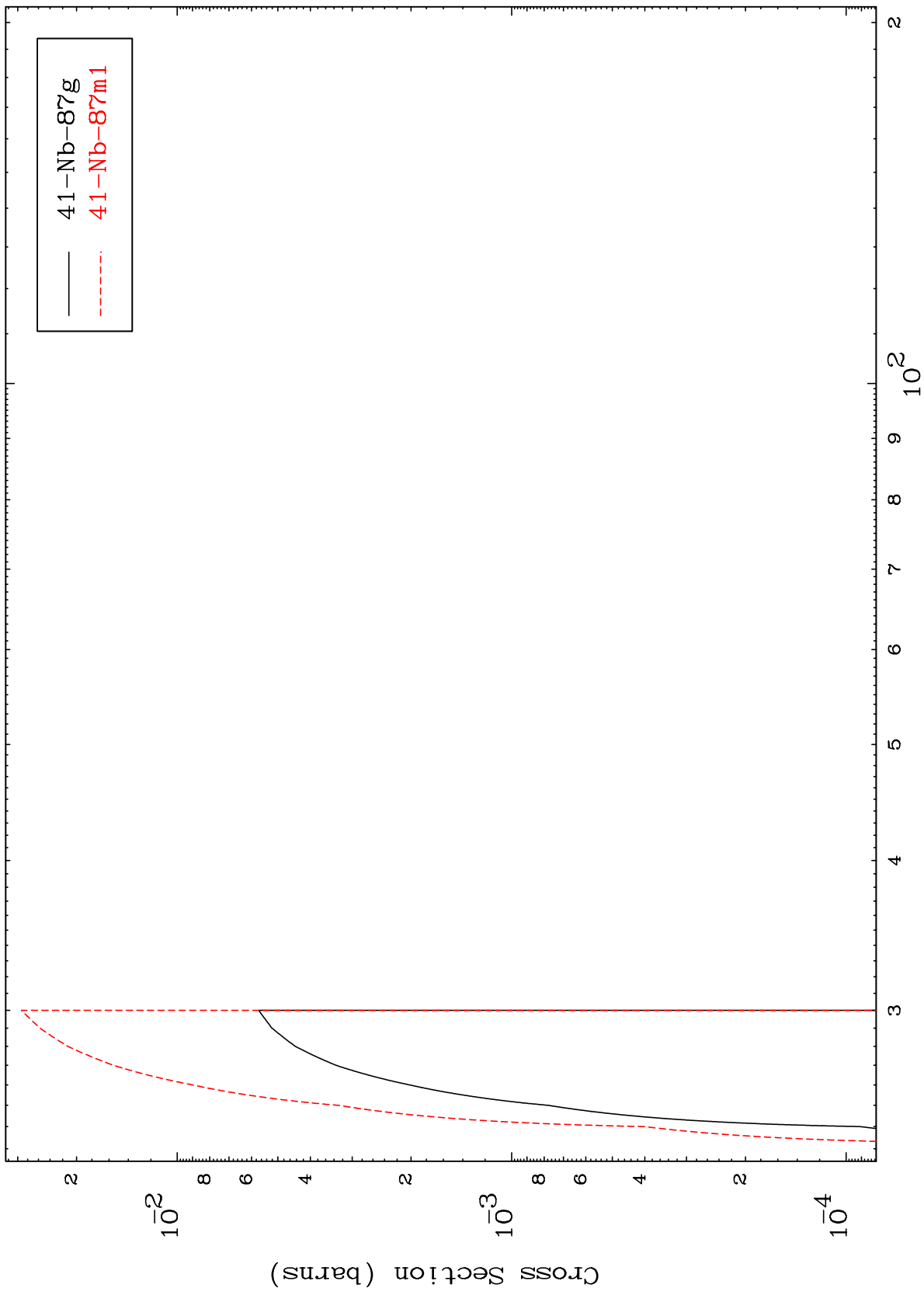
41-Nb-89

Incident Energy (MeV)

MAT 4113

41-Nb-89

(n,3n)
Radionuclide Production Cross Section



111

Incident Energy (MeV)

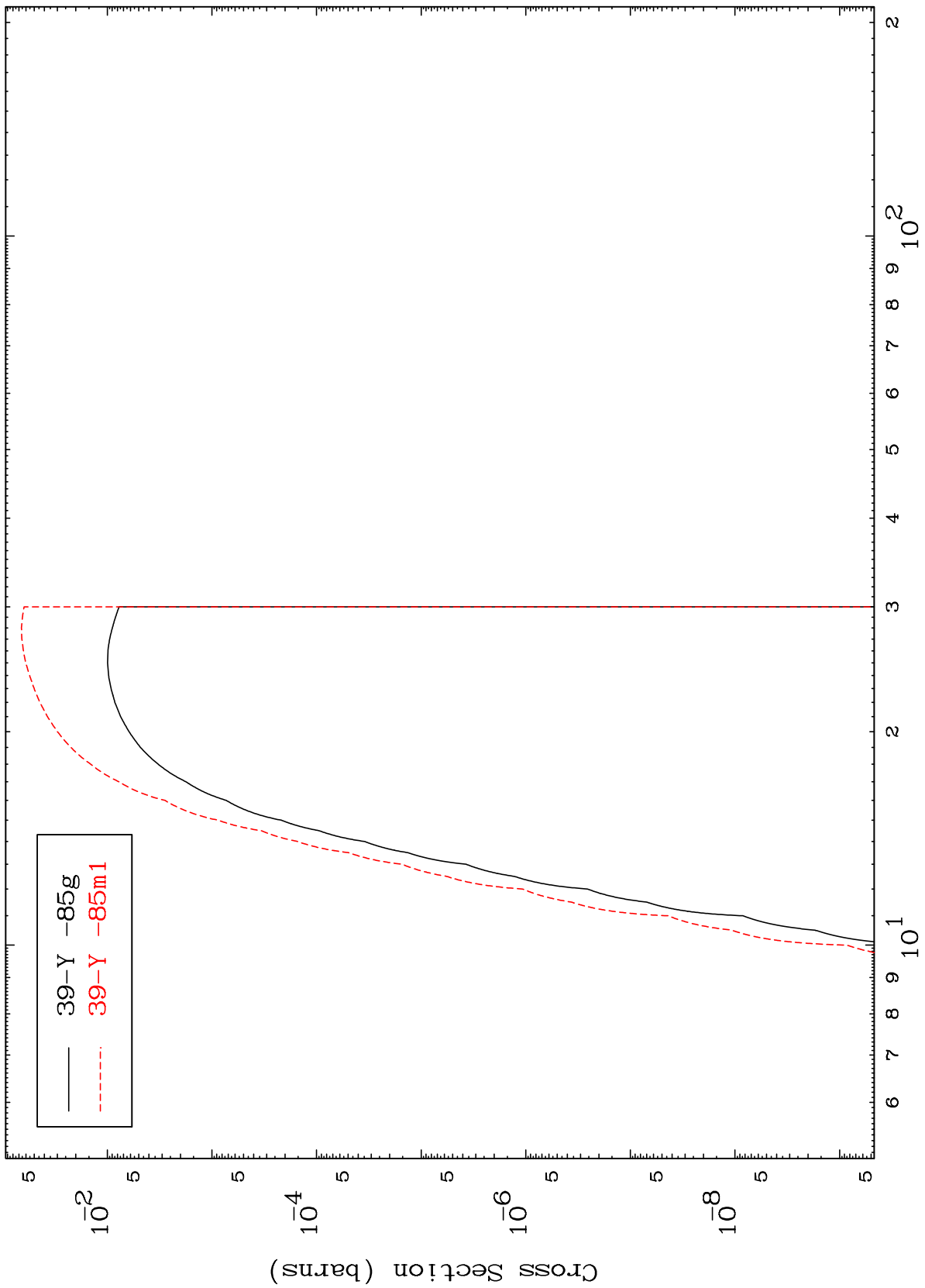
41-Nb-89

MAT 4113

$(n, n') \alpha$

41-Nb-89

Radionuclide Production Cross Section



— 39-Y -85g
- - - 39-Y -85m1

112

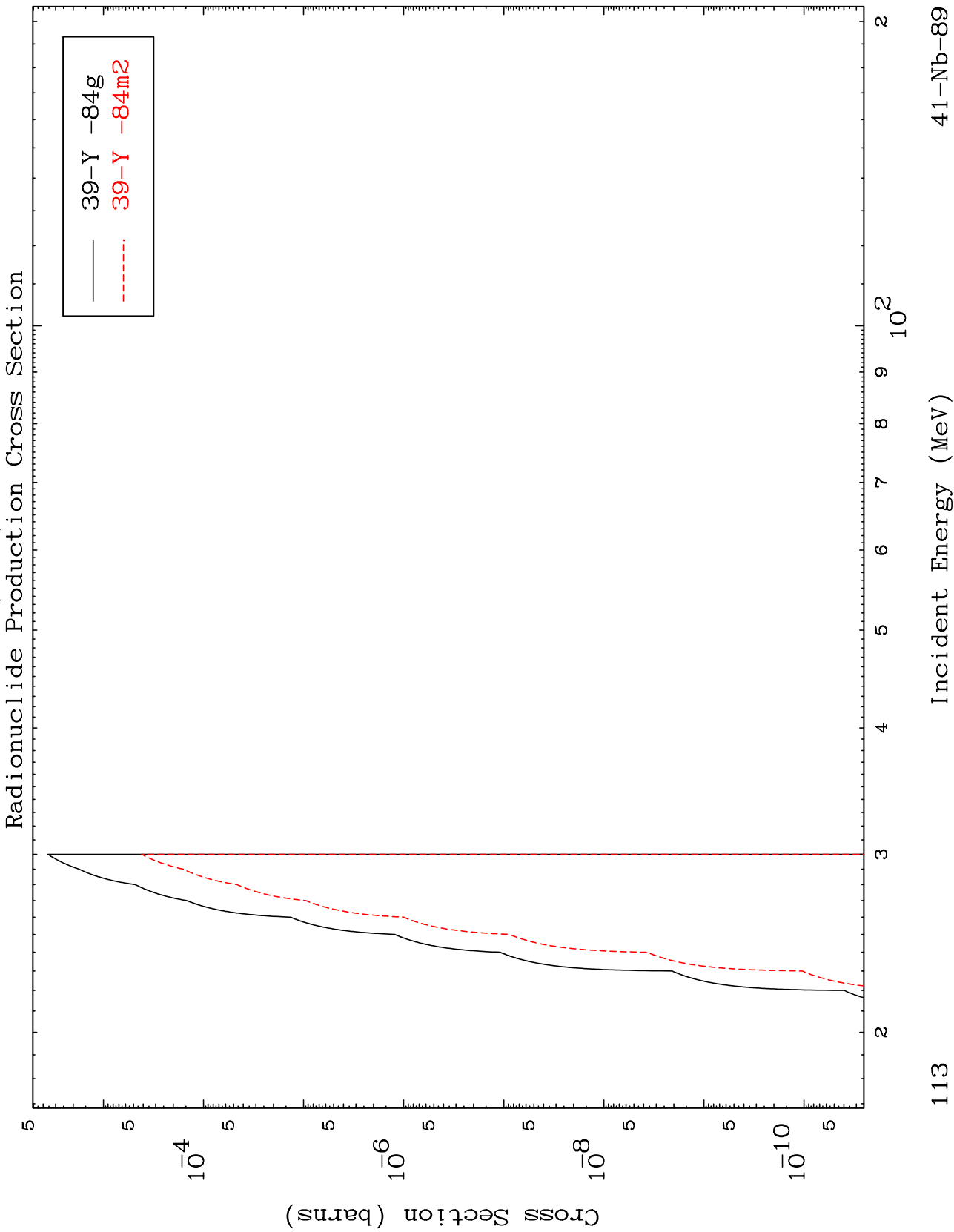
Incident Energy (MeV)

41-Nb-89

MAT 4113

(n,2n) α

41-Nb-89



113

Incident Energy (MeV)

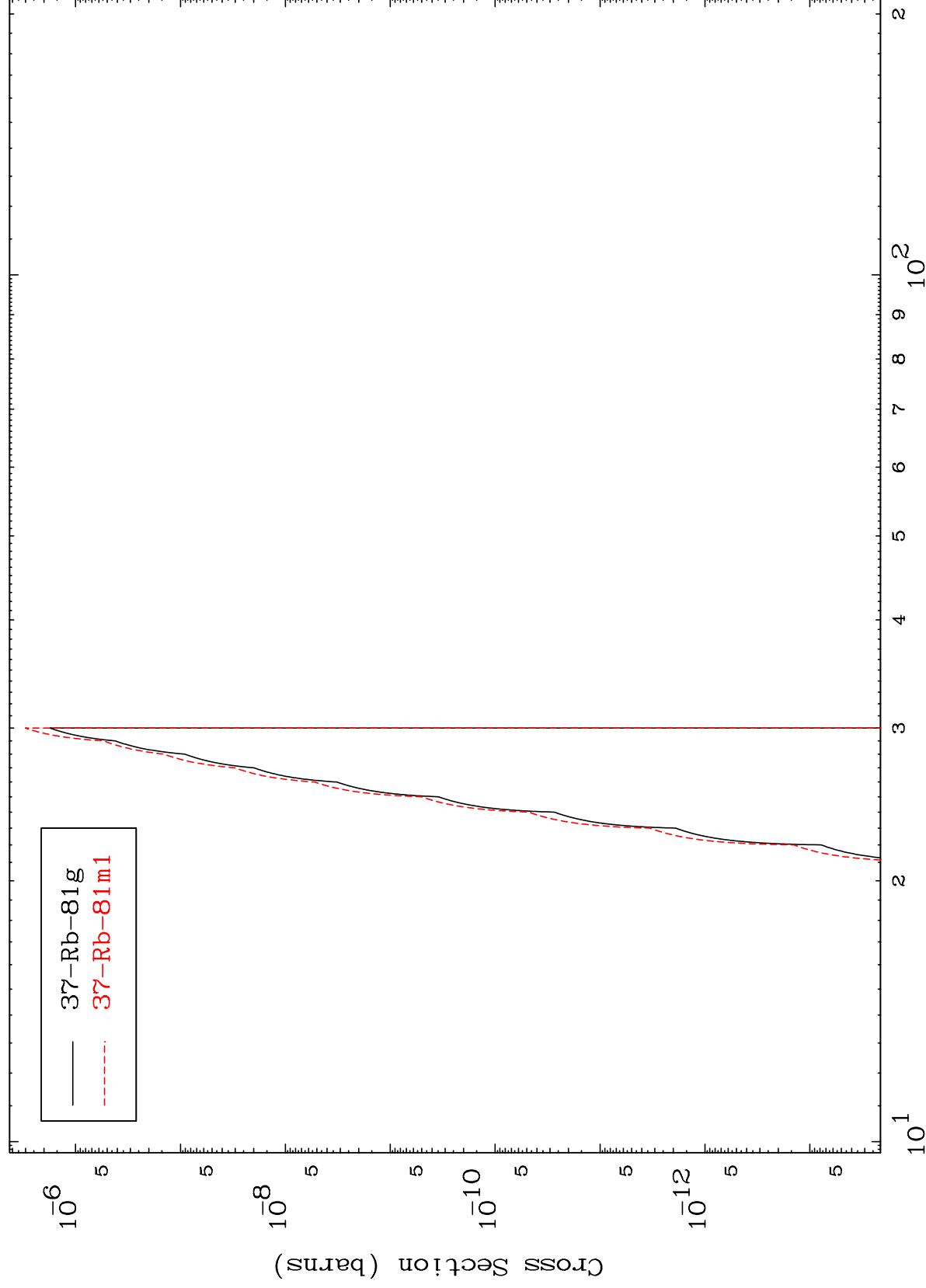
41-Nb-89

MAT 4113

(n,n') 2 α

41-Nb-89

Radionuclide Production Cross Section



114

Incident Energy (MeV)

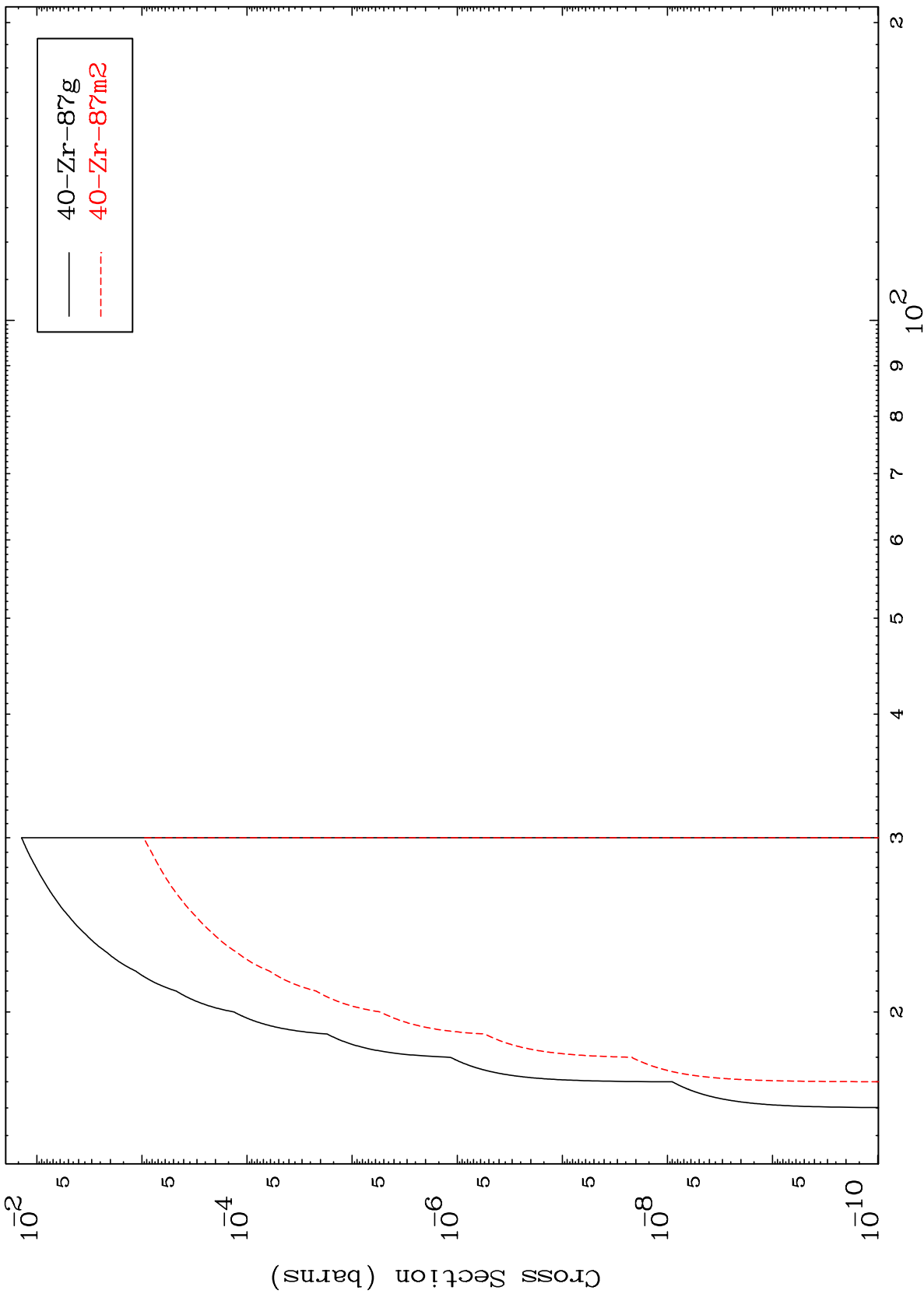
41-Nb-89

MAT 4113

(n,n') d

41-Nb-89

Radionuclide Production Cross Section



115

Incident Energy (MeV)

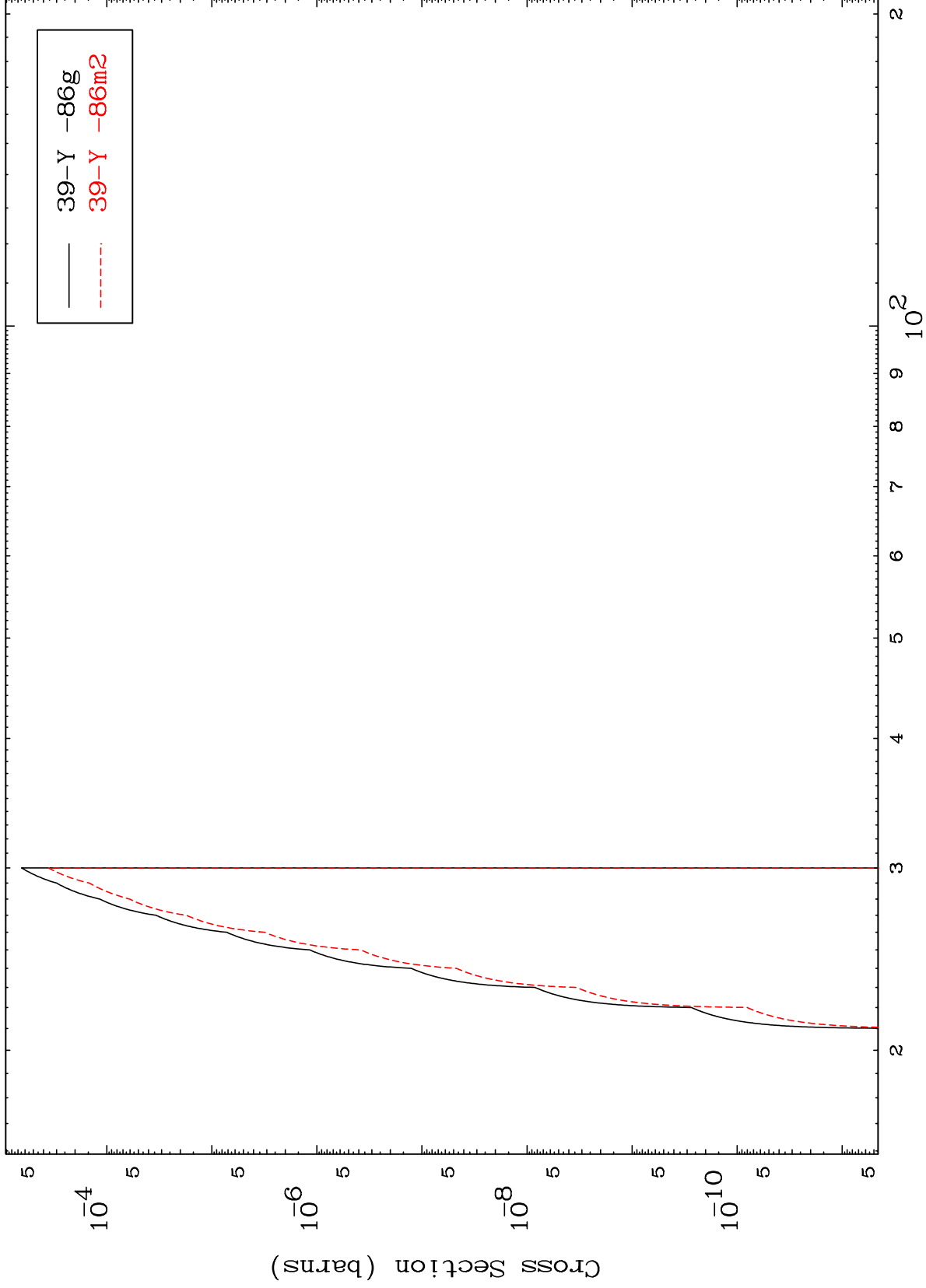
41-Nb-89

MAT 4113

(n,n') He-3

41-Nb-89

Radionuclide Production Cross Section



116

Incident Energy (MeV)

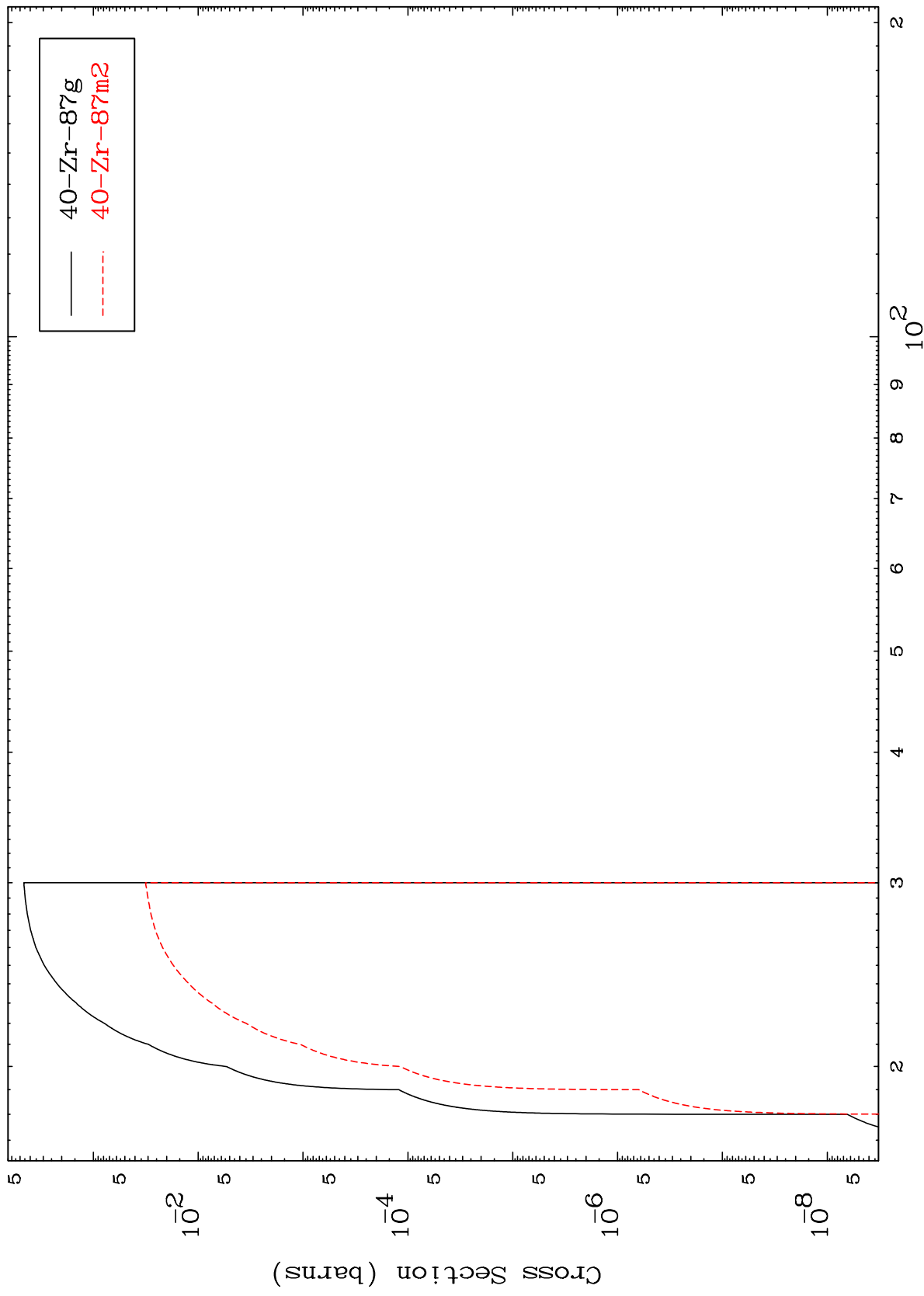
41-Nb-89

MAT 4113

(n,2n) p

41-Nb-89

Radionuclide Production Cross Section



117

Incident Energy (MeV)

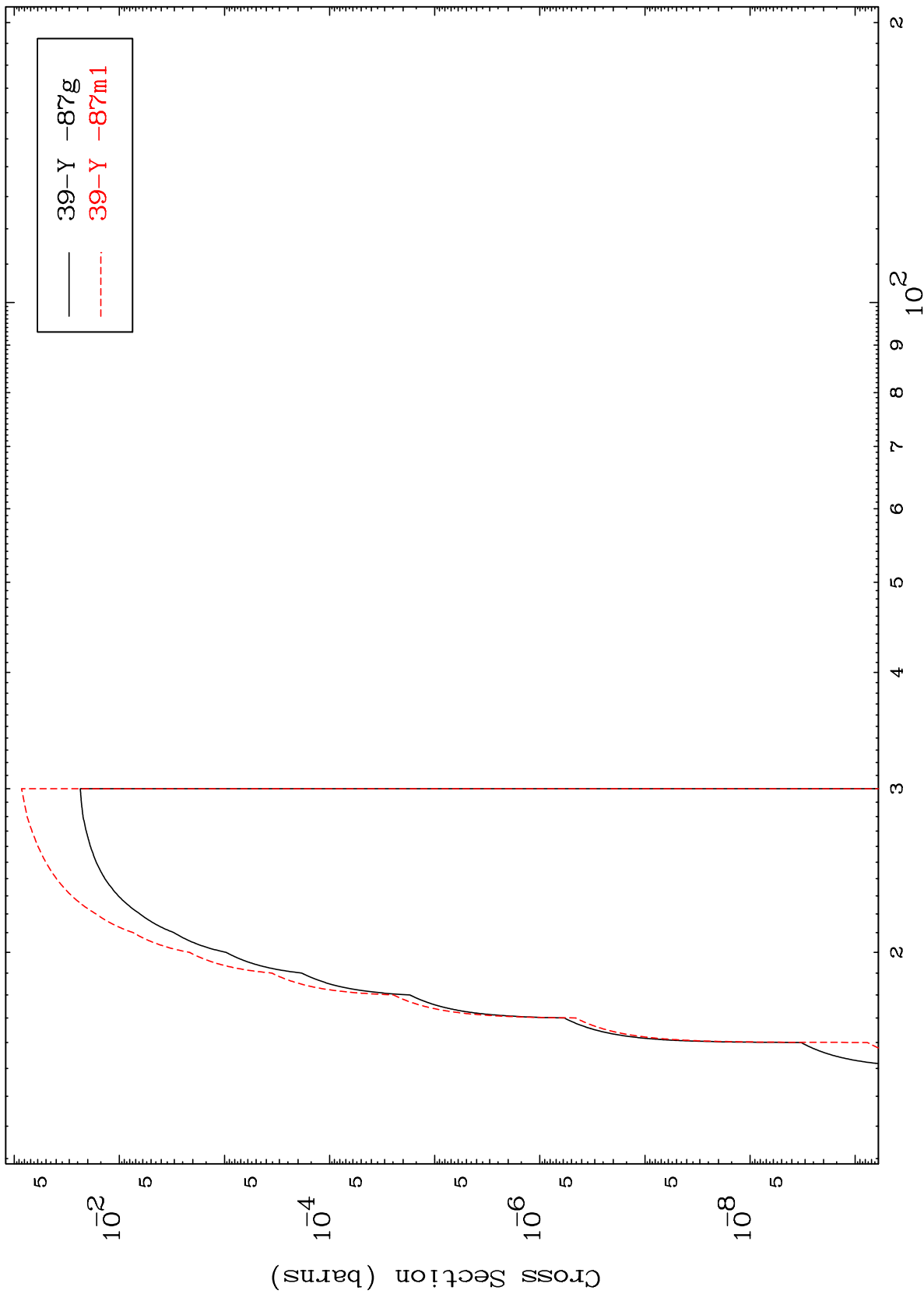
41-Nb-89

MAT 4113

(n,2n) p

41-Nb-89

Radionuclide Production Cross Section

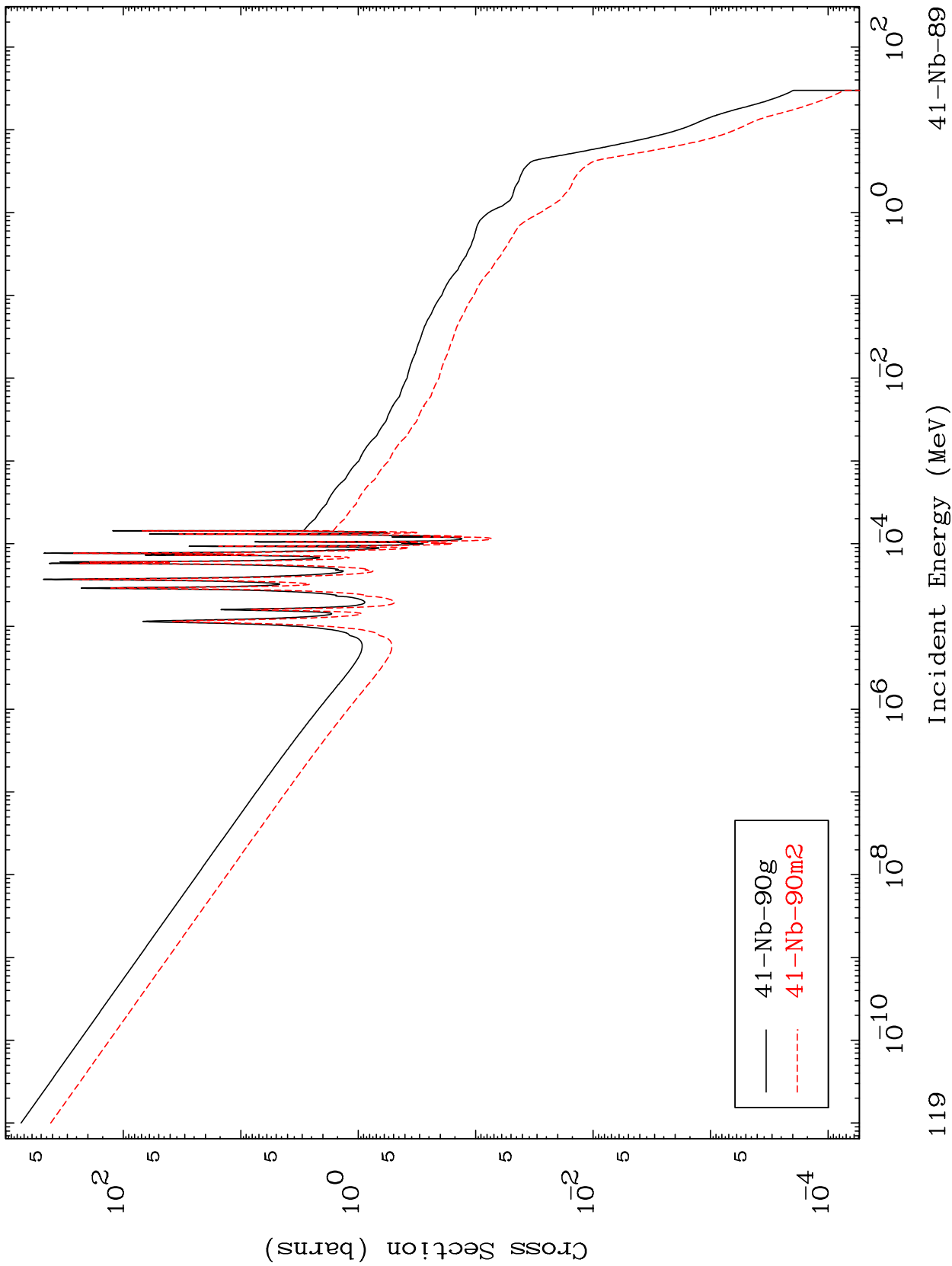


118

Incident Energy (MeV)

41-Nb-89

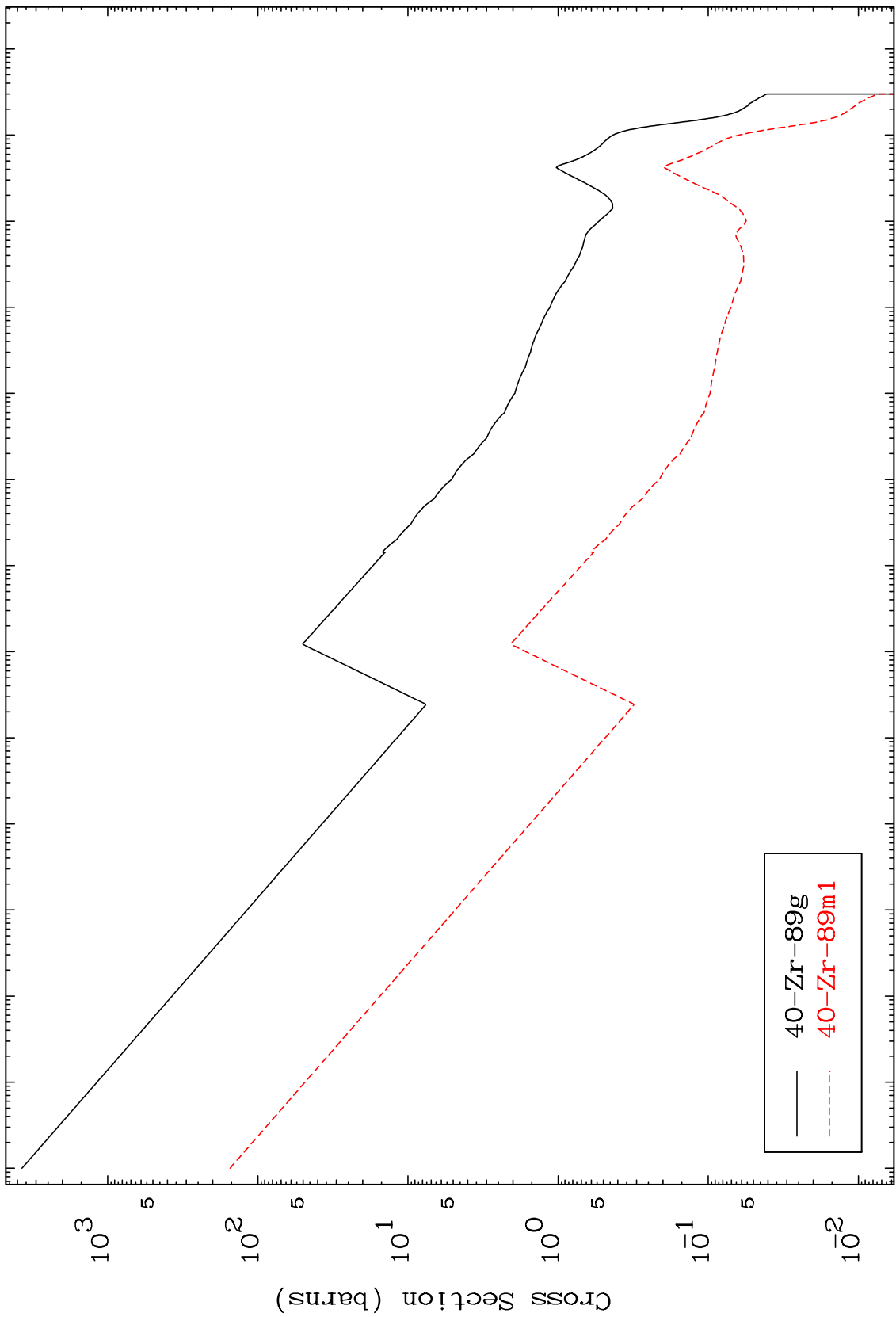
(n, γ)
Radionuclide Production Cross Section



MAT 4113

41-Nb-89

(n,p)
Radionuclide Production Cross Section

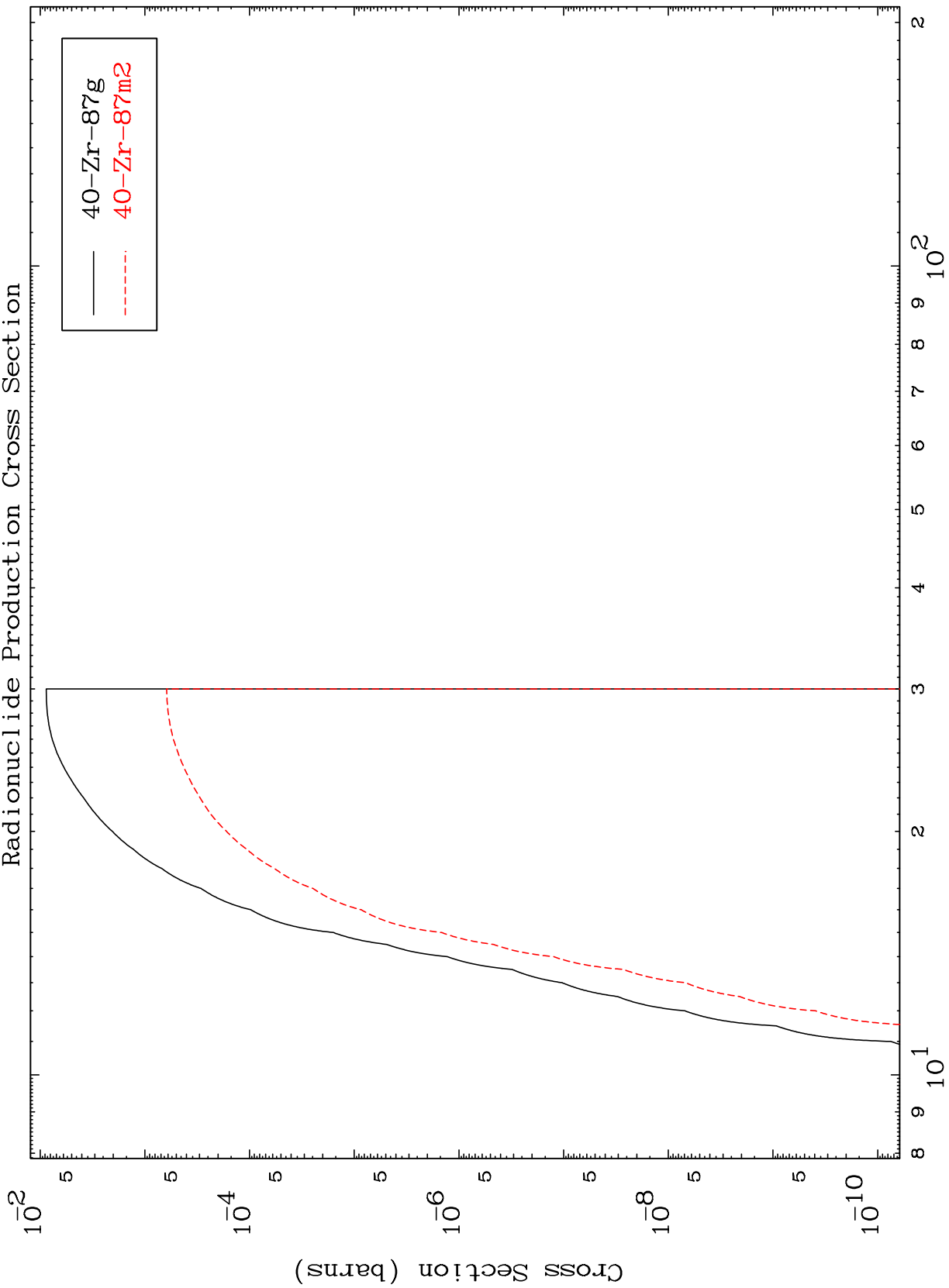


— 40-Zr-89g
- - - 40-Zr-89m1

MAT 4113

41-Nb-89

(n, t)
Radionuclide Production Cross Section



121

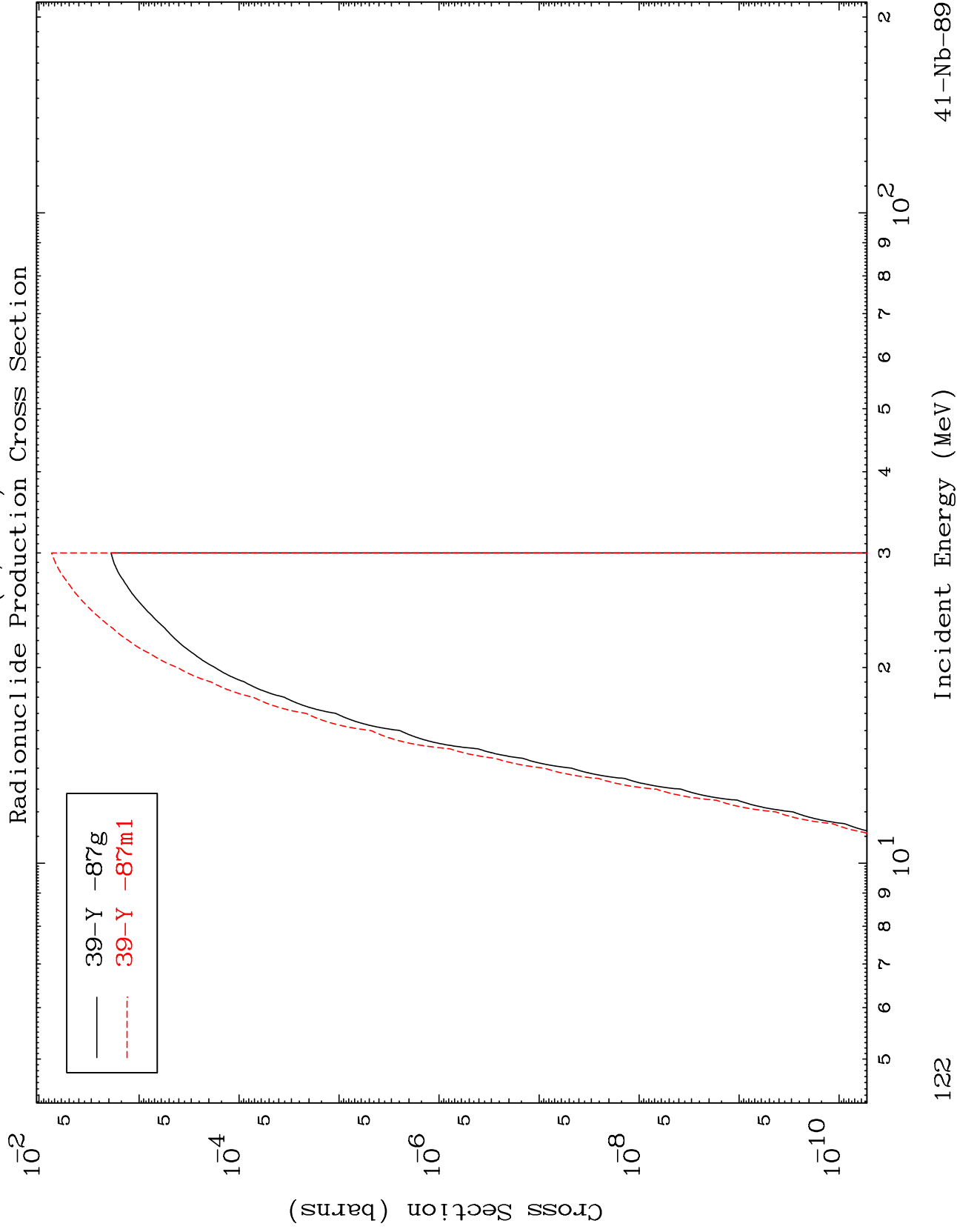
Incident Energy (MeV)

41-Nb-89

MAT 4113

(n,He-3)

41-Nb-89



122

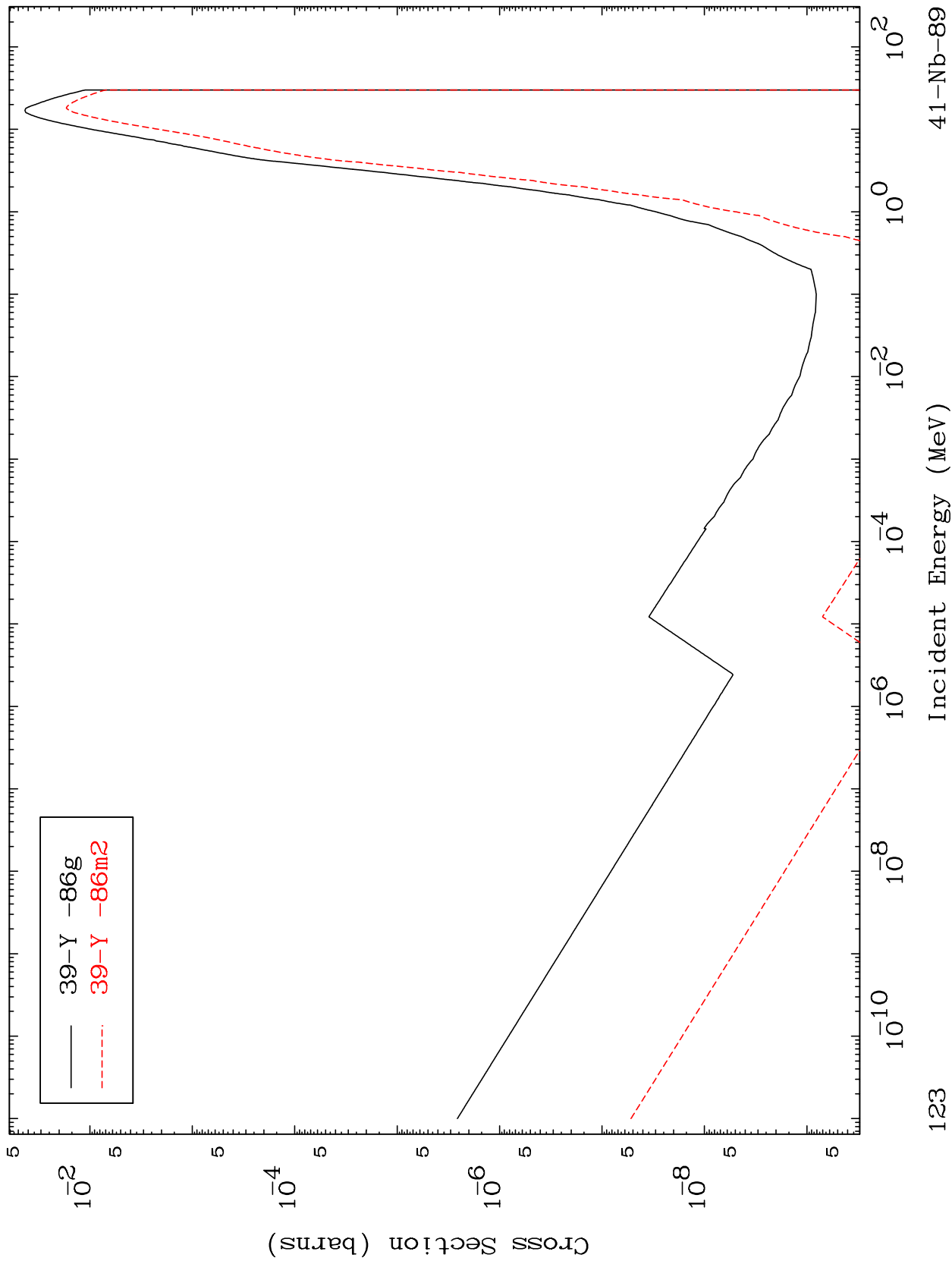
Incident Energy (MeV)

41-Nb-89

MAT 4113

41-Nb-89

Radionuclide Production Cross Section
(n, α)

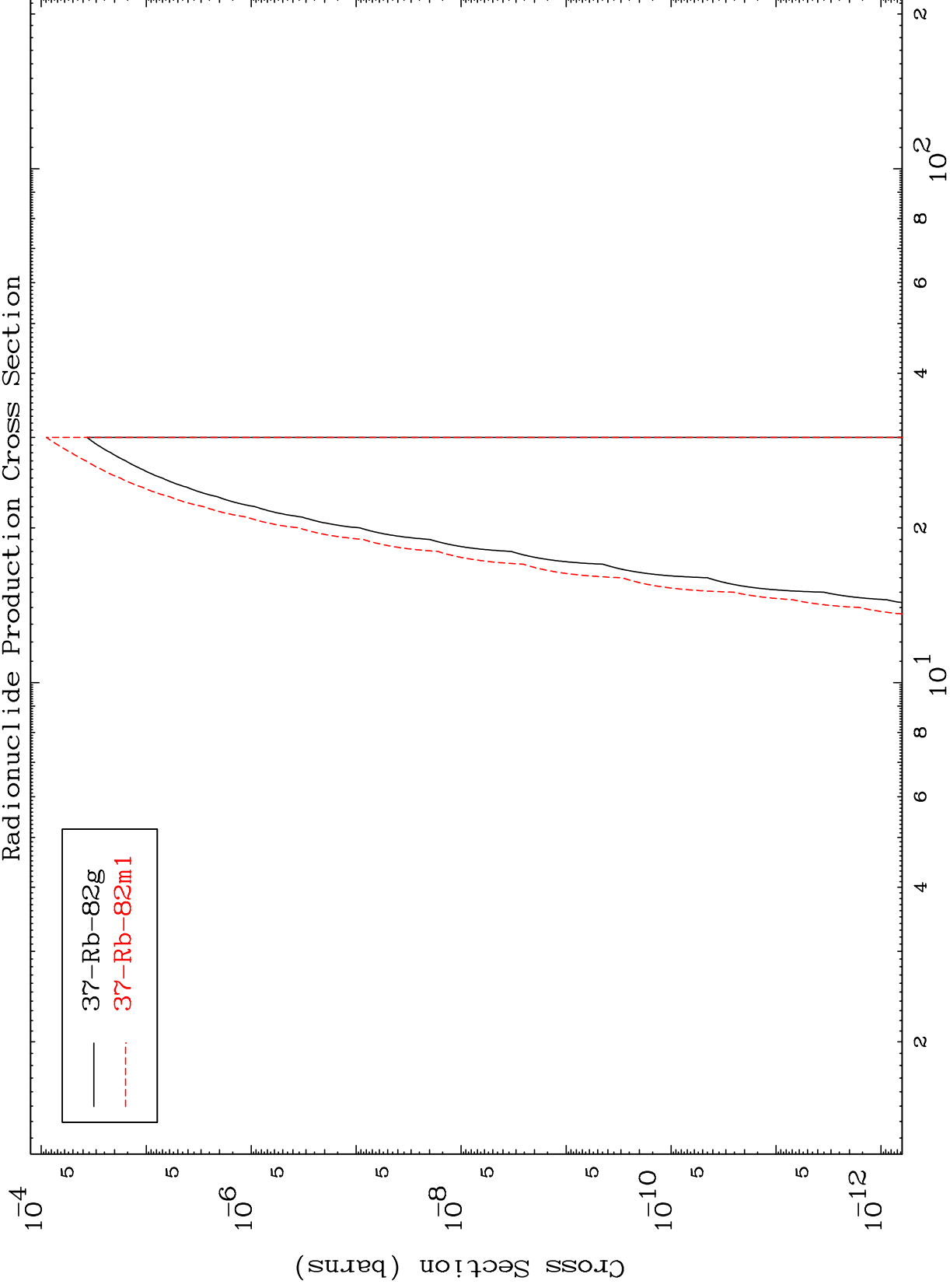


MAT 4113

(n,2α)

41-Nb-89

Radionuclide Production Cross Section



124

Incident Energy (MeV)

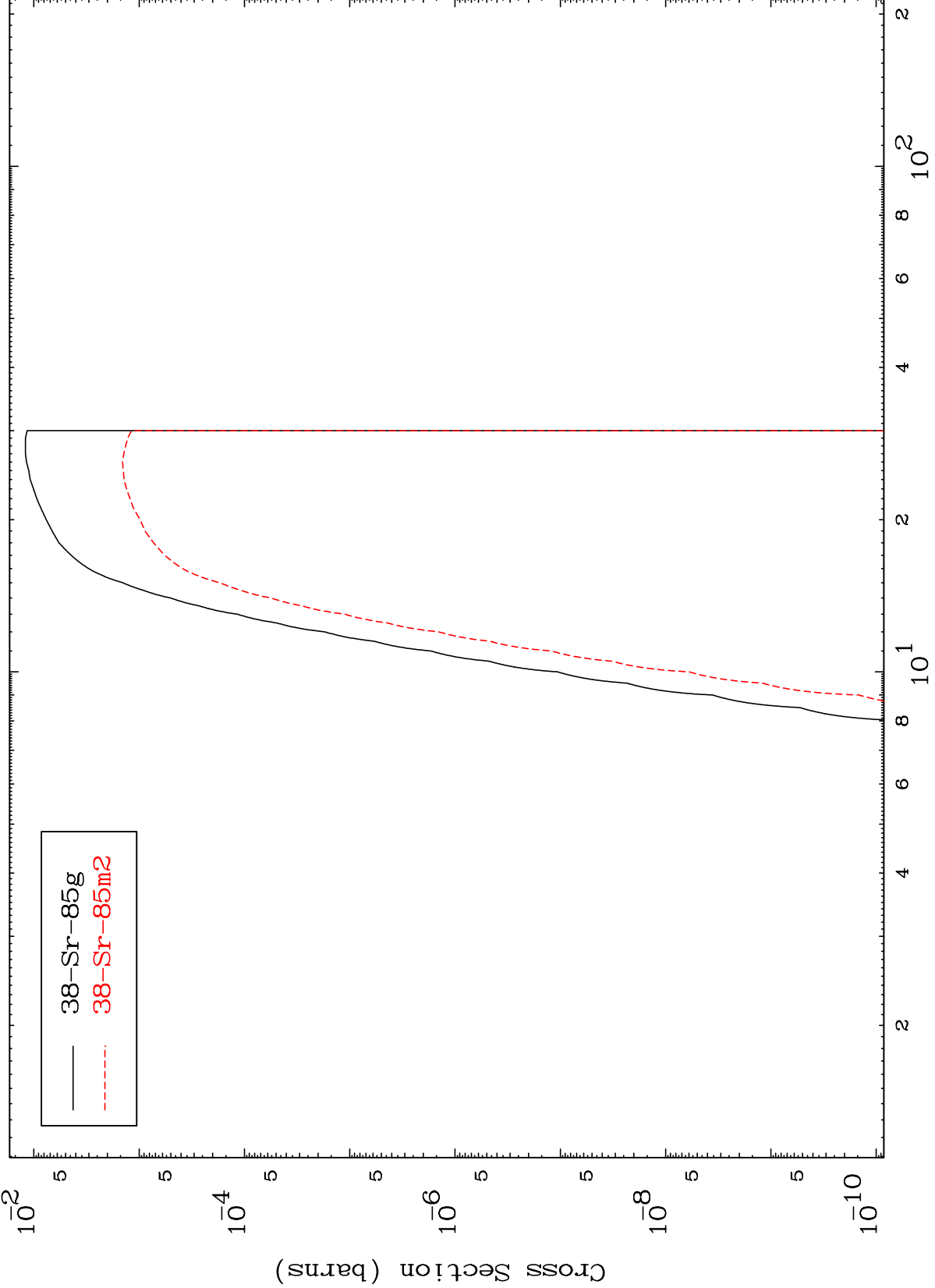
41-Nb-89

MAT 4113

(n,p) α

41-Nb-89

Radionuclide Production Cross Section



— 38-Sr-85g
- - - 38-Sr-85m2

125

Incident Energy (MeV)

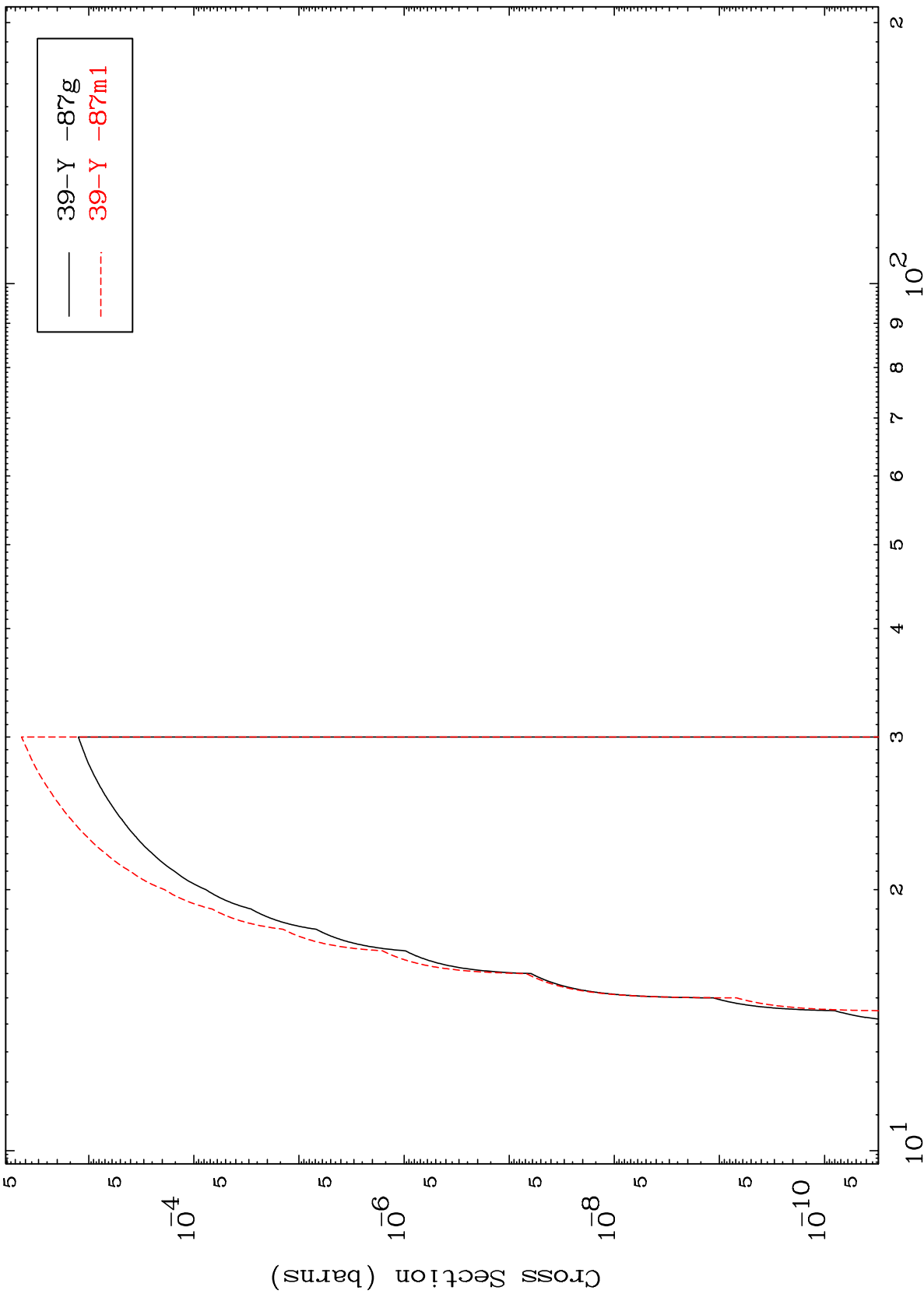
41-Nb-89

MAT 4113

(n,p) d

41-Nb-89

Radionuclide Production Cross Section



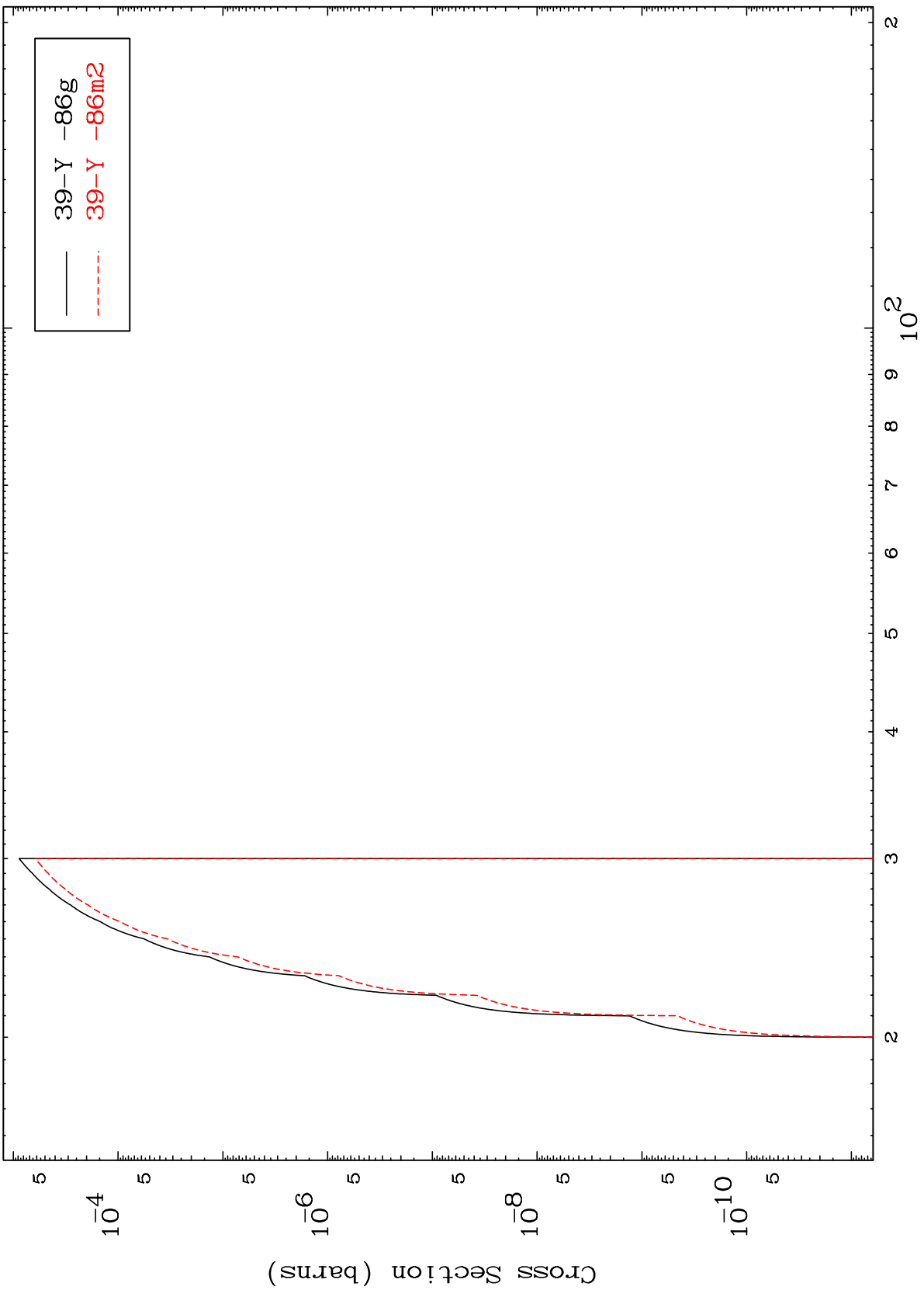
39-Y -87g
39-Y -87m1

126

Incident Energy (MeV)

41-Nb-89

Radionuclide Production Cross Section



39-Y -86g
39-Y -86m2