

Benchmark #6

3 MeV H on Fe

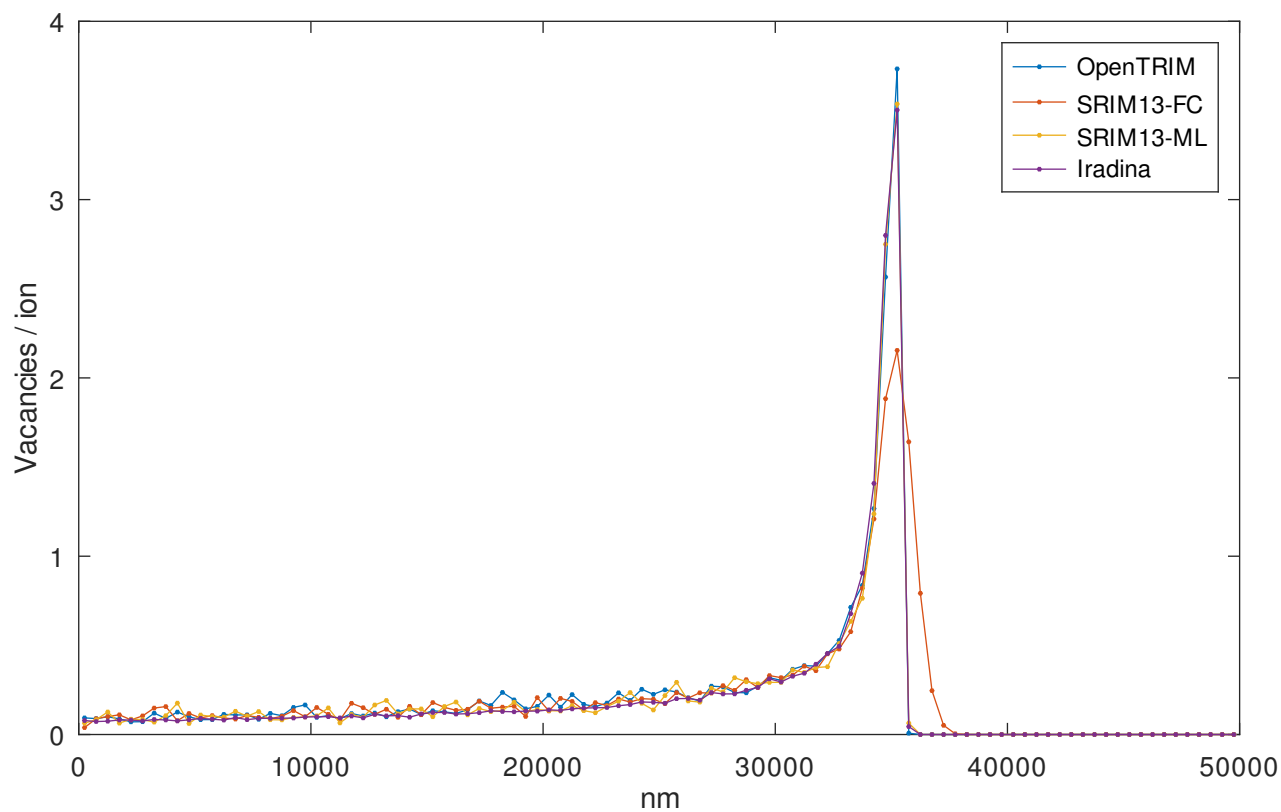
Ion energy E0 = 3e+06 eV

Target depth = 50000 nm

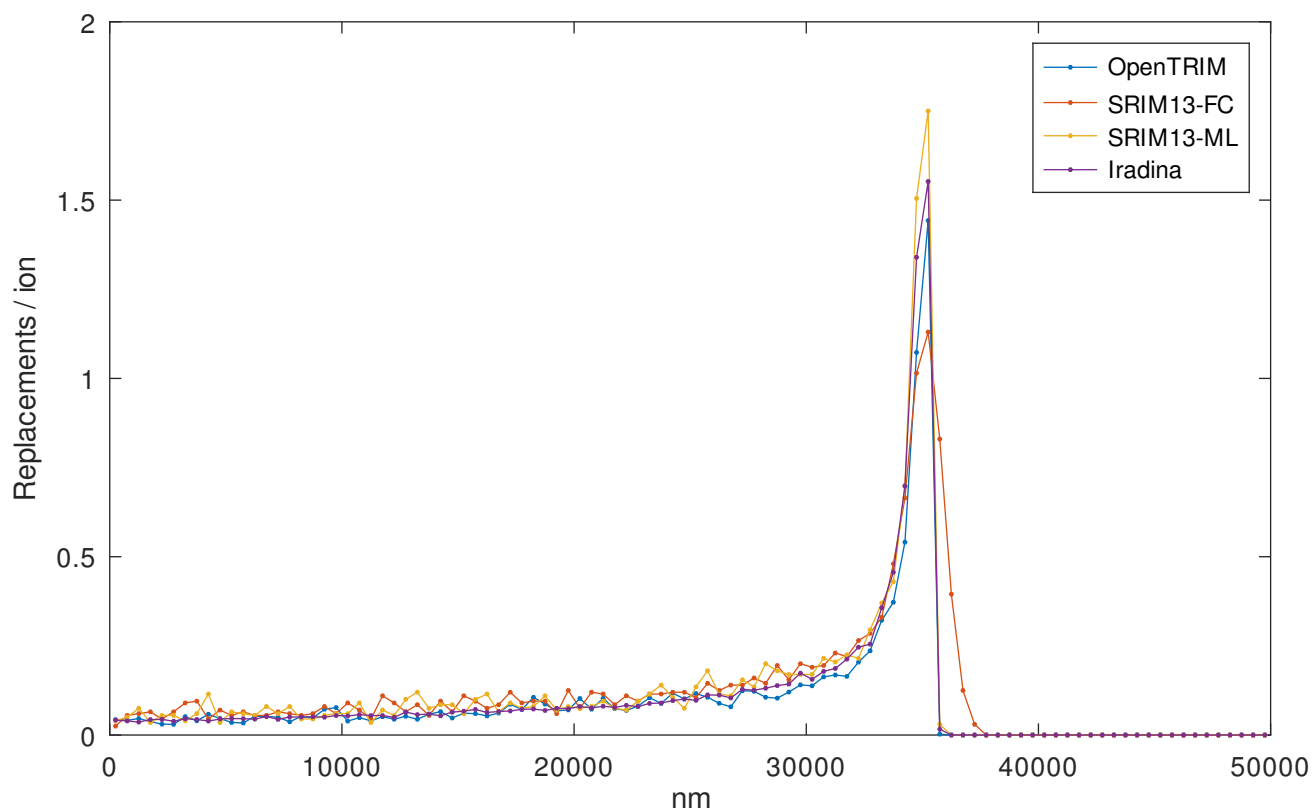
Summary Table

Quantity	OpenTRIM	SRIM13-FC	SRIM13-ML	Iradina
V(Fe)	20.8	20.9	20	19.5
R(tot)	9	11.9	11.4	9.95
I(H)	1	1	1	1
EI(H)/E0	0.999	0.999	0.999	0
EI(r)/E0	8.3e-05	7.53e-05	7.14e-05	0
EI/E0	0.999	0.999	0.999	0.999
EPh(H)/E0	0.000457	0.000316	0.000486	0
EPh(r)/E0	0.000549	0.000848	0.000994	0
EPh(r)/E0	0.00101	0.00101	0.00116	0.00101
1 - (EI+EPh)/E0	0	-0.000302	-0.000382	-4.77e-07

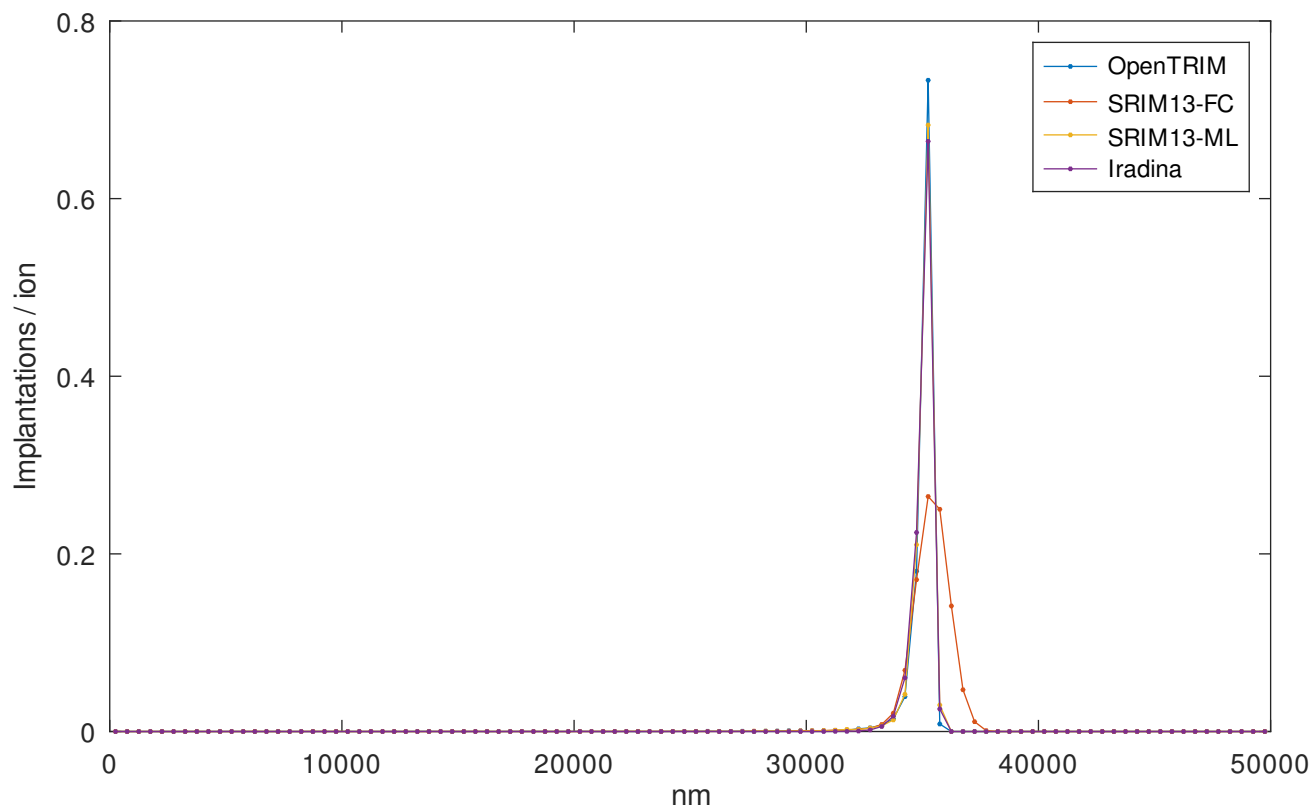
Vacancies of Fe in Fe



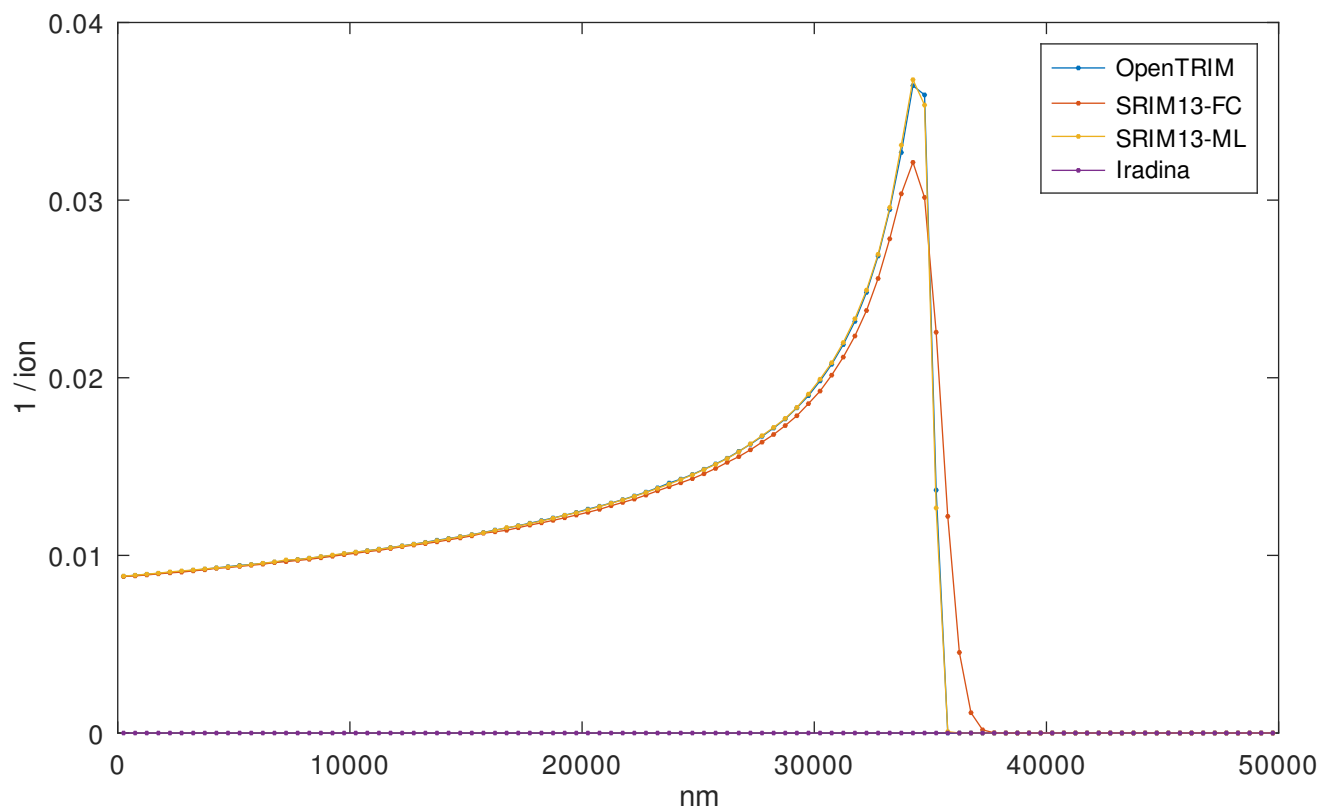
Replacements



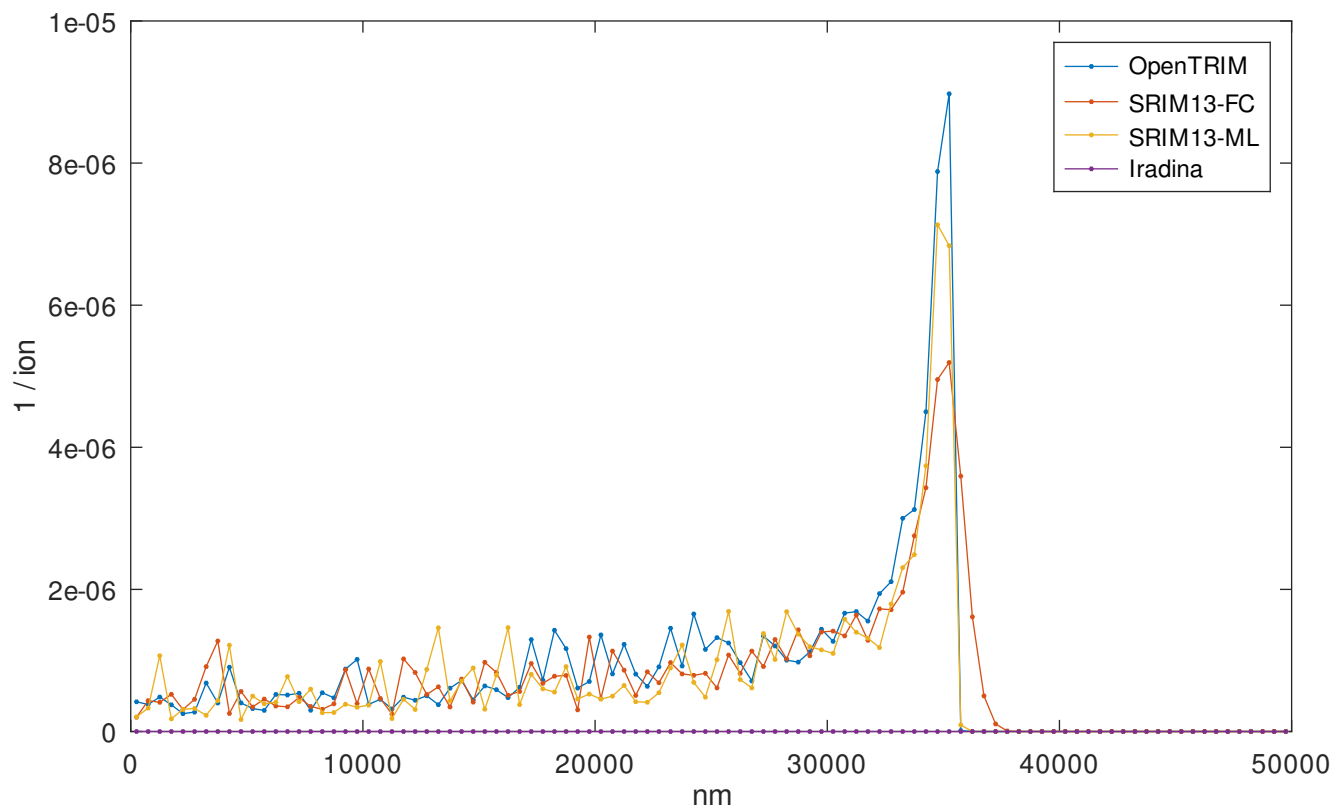
Implanted H ion



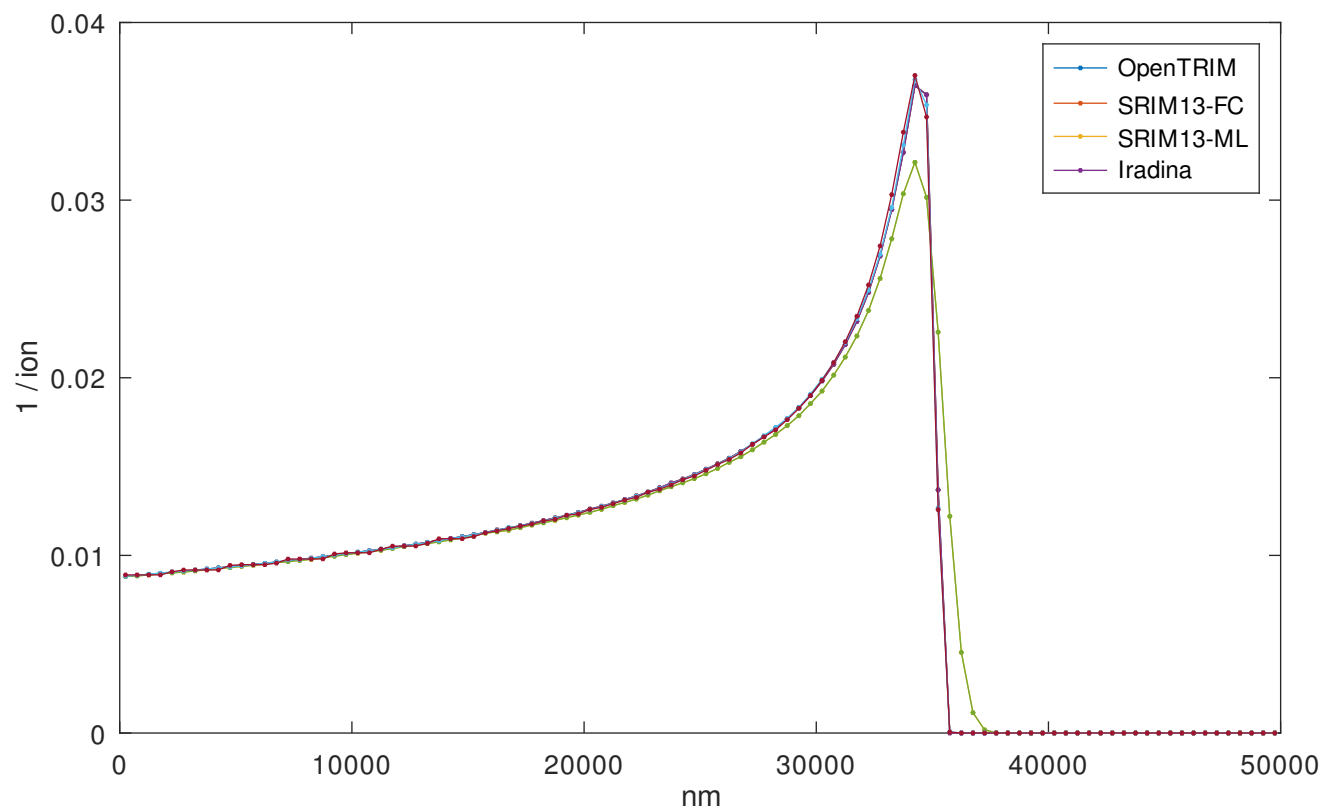
Ionization fraction E_I/E_0 by H ion



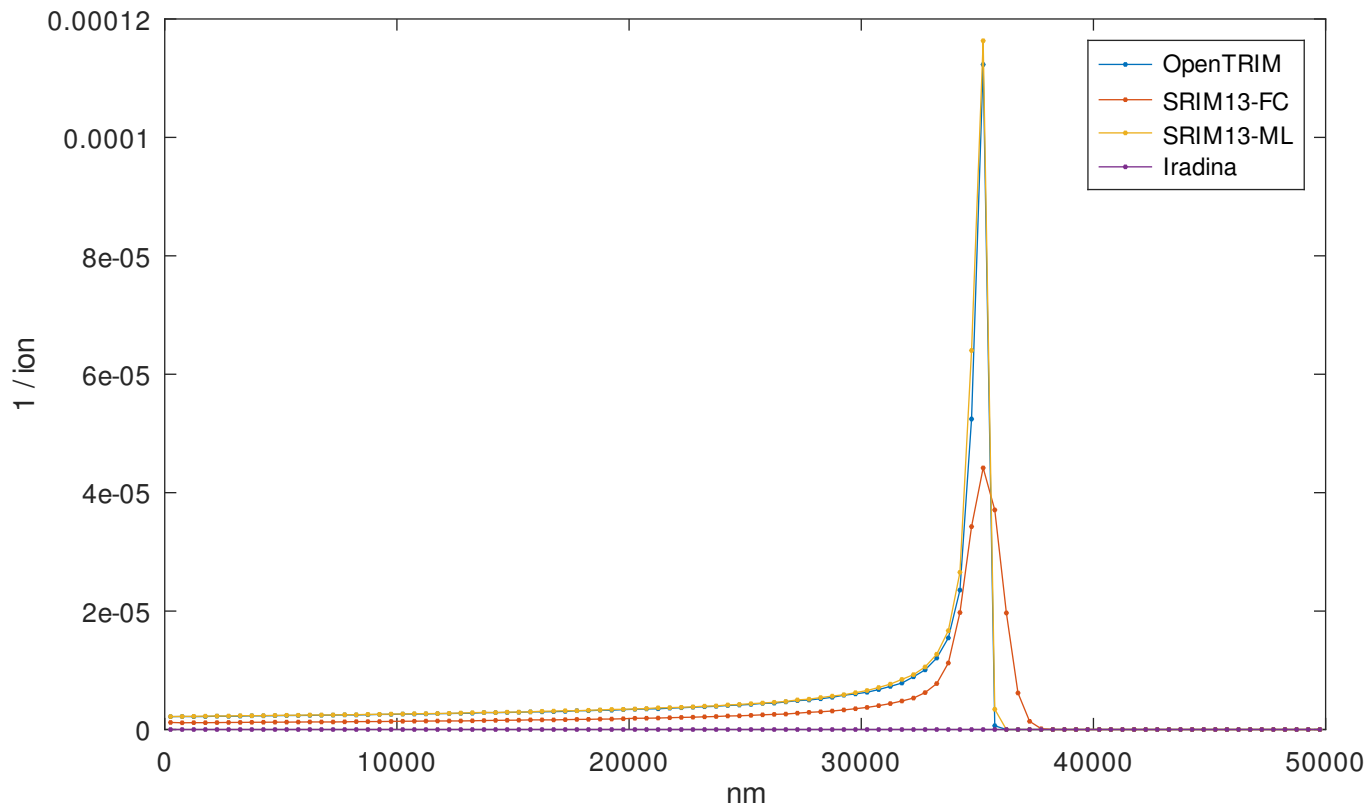
Ionization fraction E_I/E_0 by recoils



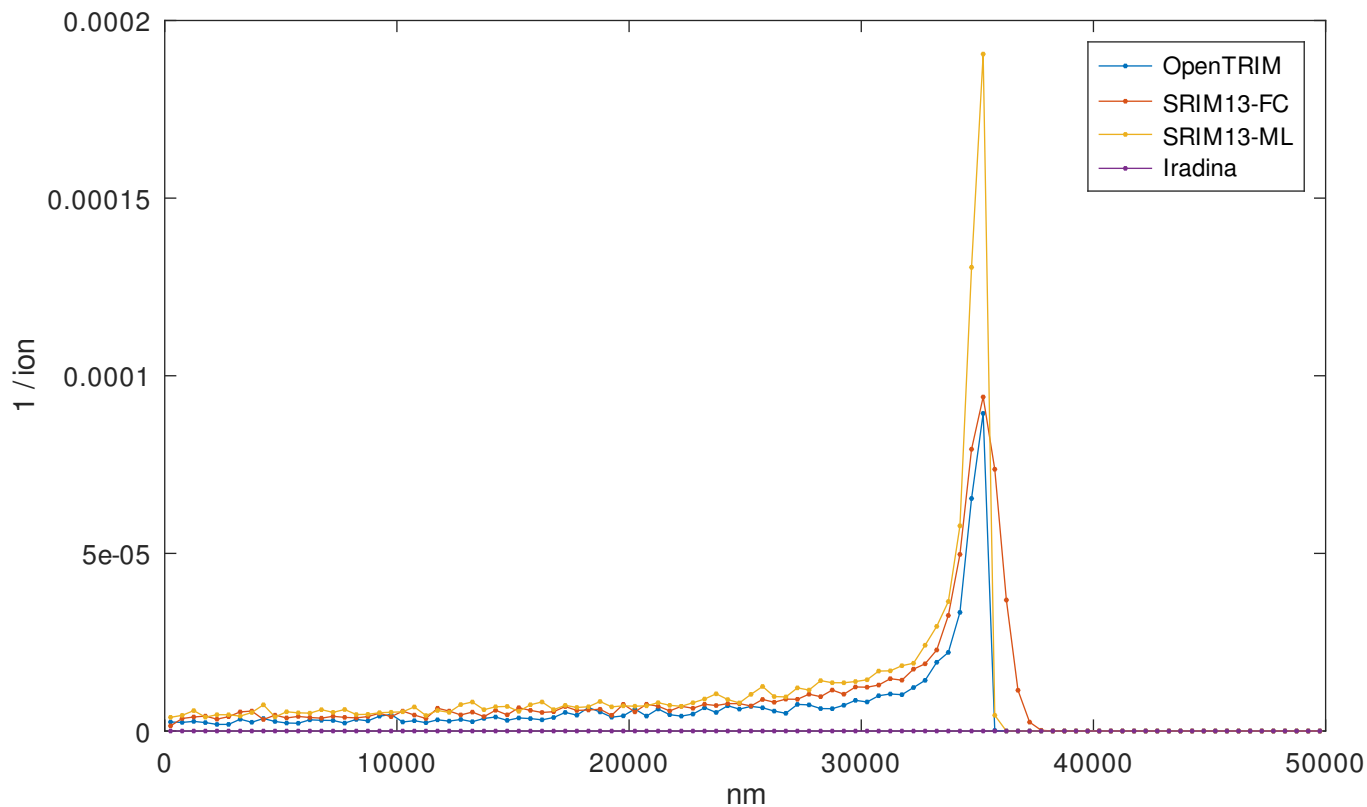
Total Ionization fraction E_I/E_0



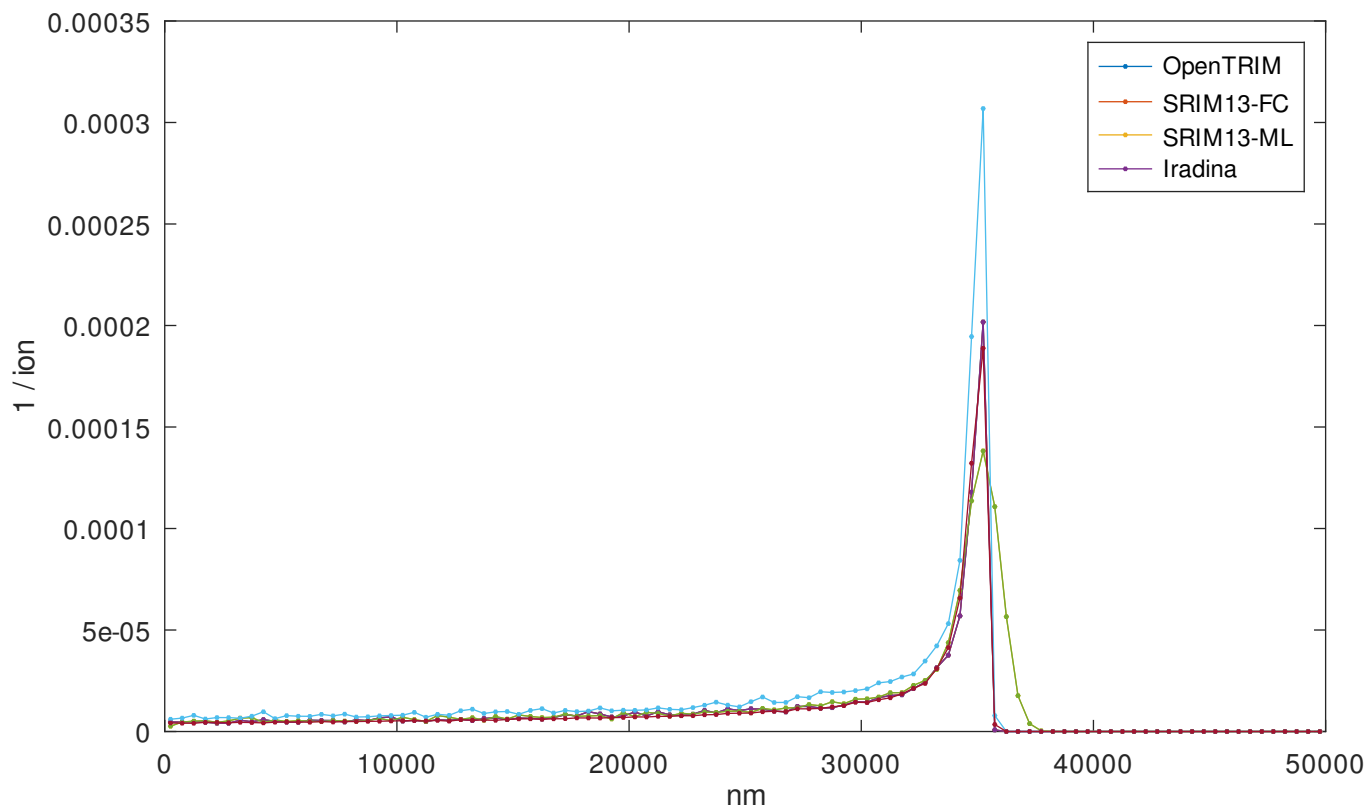
Phonon energy fraction E_{Ph}/E_0 by H ion



Phonon energy fraction E_{Ph}/E_0 by recoils



Total Phonon energy fraction E_{Ph}/E_0



Total fractional energy deposition $(E_I + E_{Ph})/E_0$

