

Benchmark #7

1 MeV H on Fe

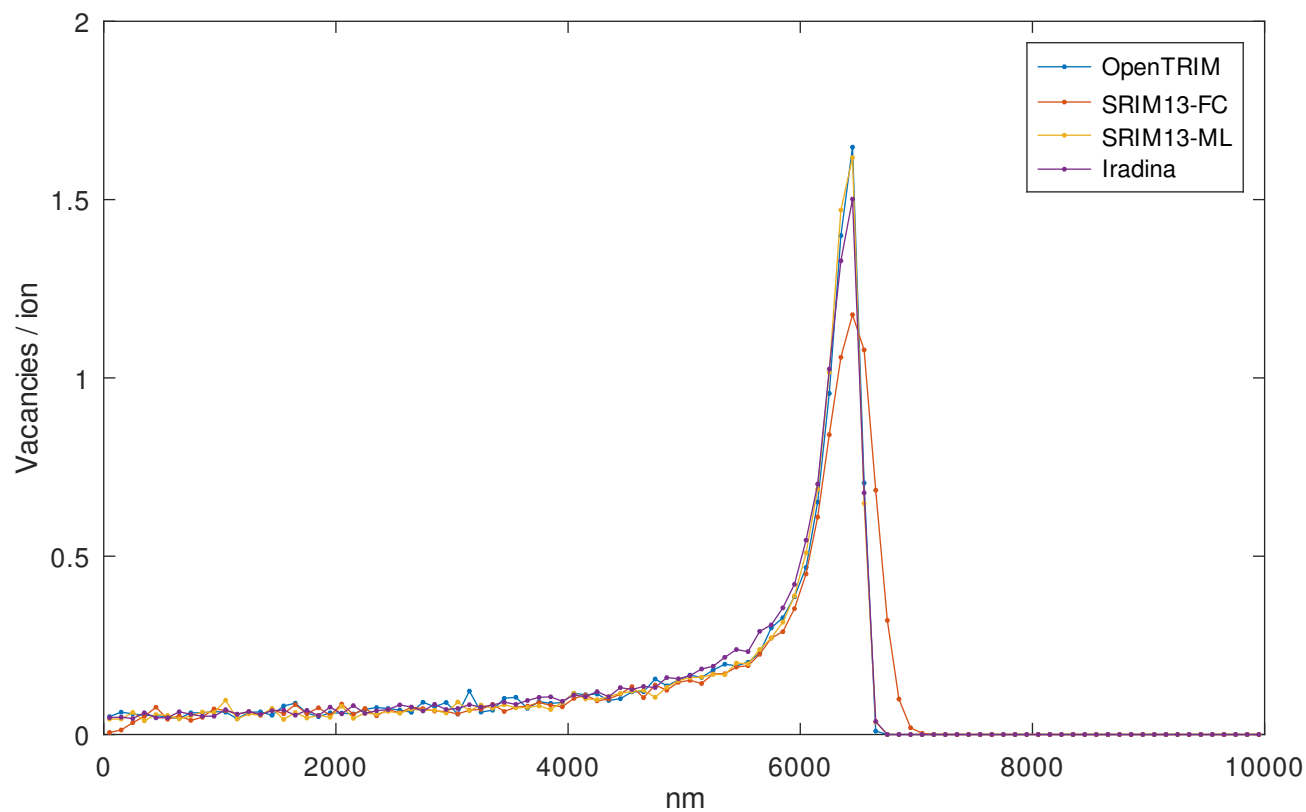
Ion energy E0 = 1e+06 eV

Target depth = 10000 nm

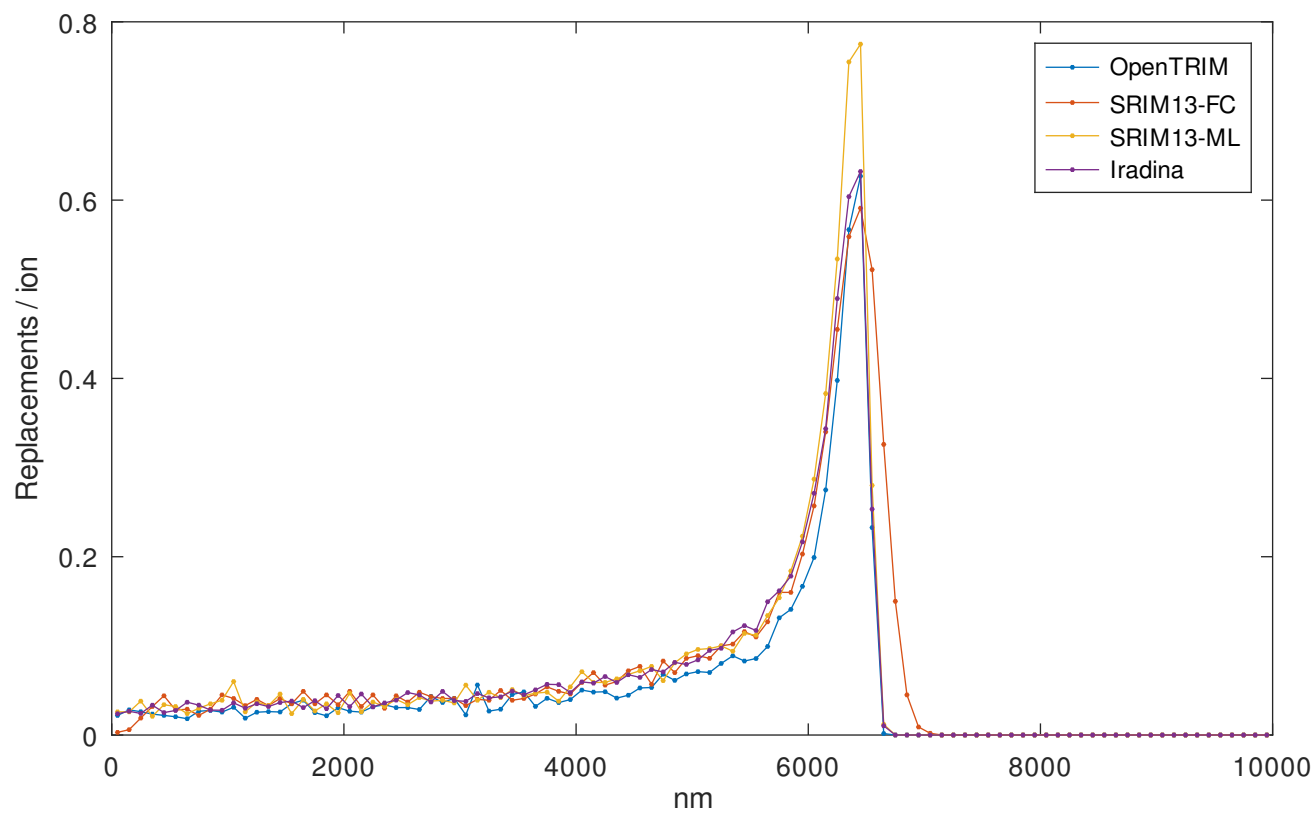
Summary Table

Quantity	OpenTRIM	SRIM13-FC	SRIM13-ML	Iradina
V(Fe)	12.2	12.2	11.9	12.5
R(tot)	5.08	6.69	6.53	6.14
I(H)	1	1	1	1
EI(H)/E0	0.998	0.998	0.998	0
EI(r)/E0	0.00012	0.000104	0.000102	0
EI/E0	0.998	0.998	0.998	0.998
EPh(H)/E0	0.000848	0.000654	0.000915	0
EPh(r)/E0	0.000934	0.00154	0.00178	0
EPh(r)/E0	0.00178	0.00178	0.00219	0.00178
1 - (EI+EPh)/E0	8.17e-06	-0.00055	-0.000704	0

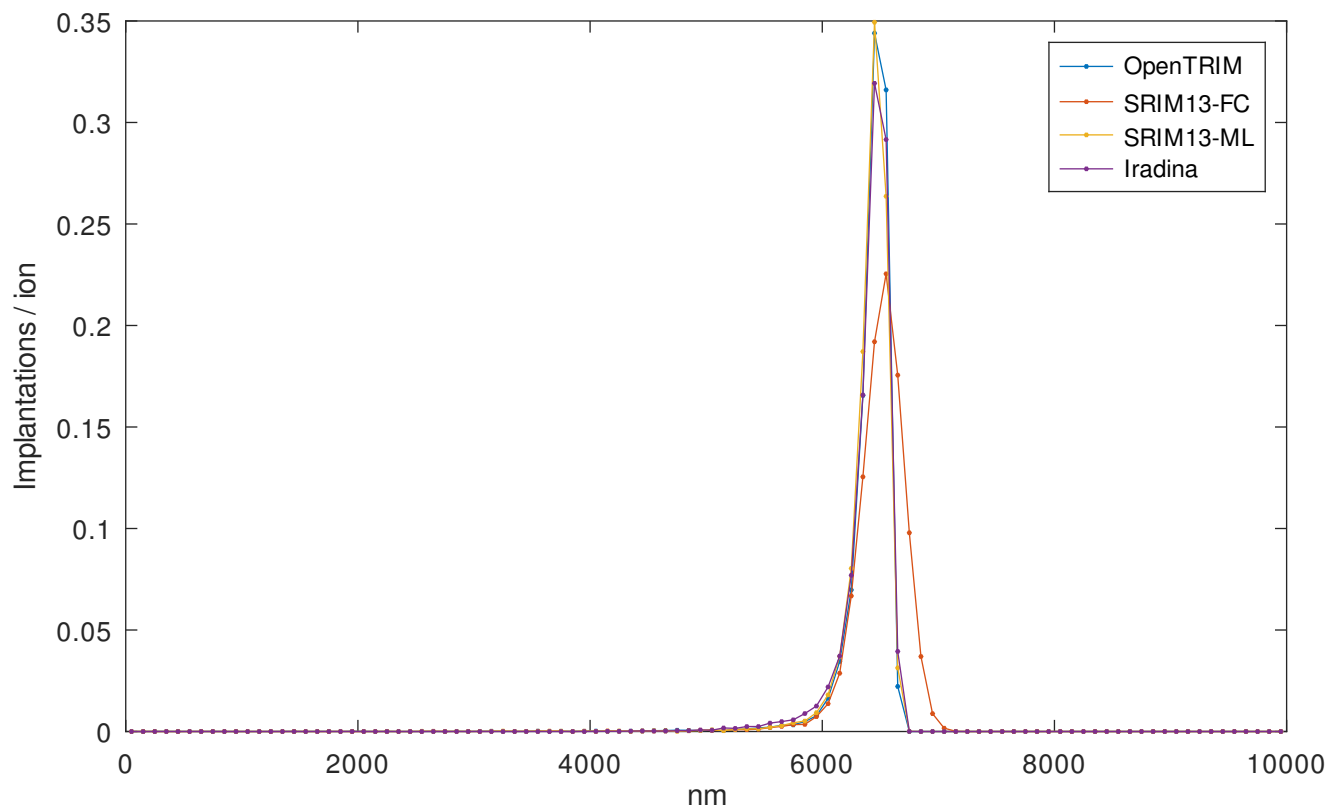
Vacancies of Fe in Fe



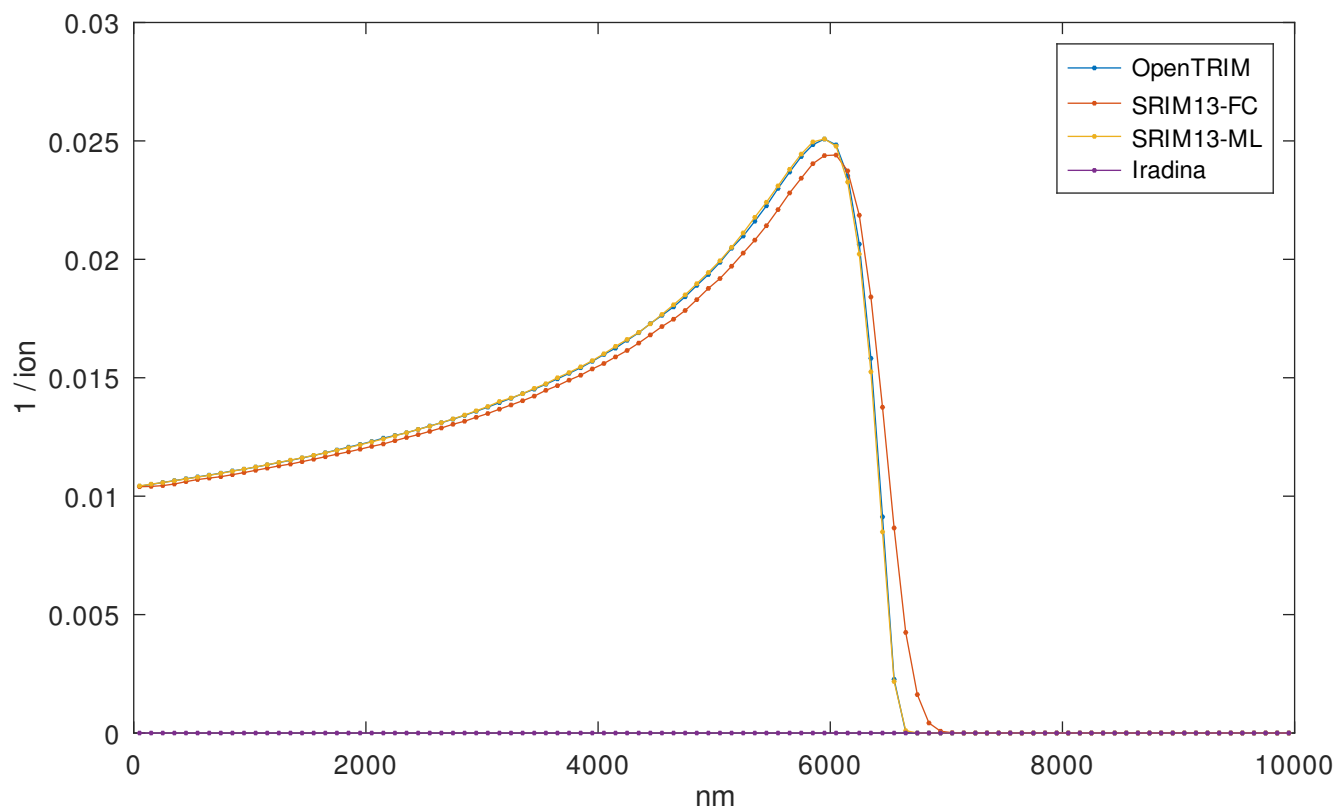
Replacements



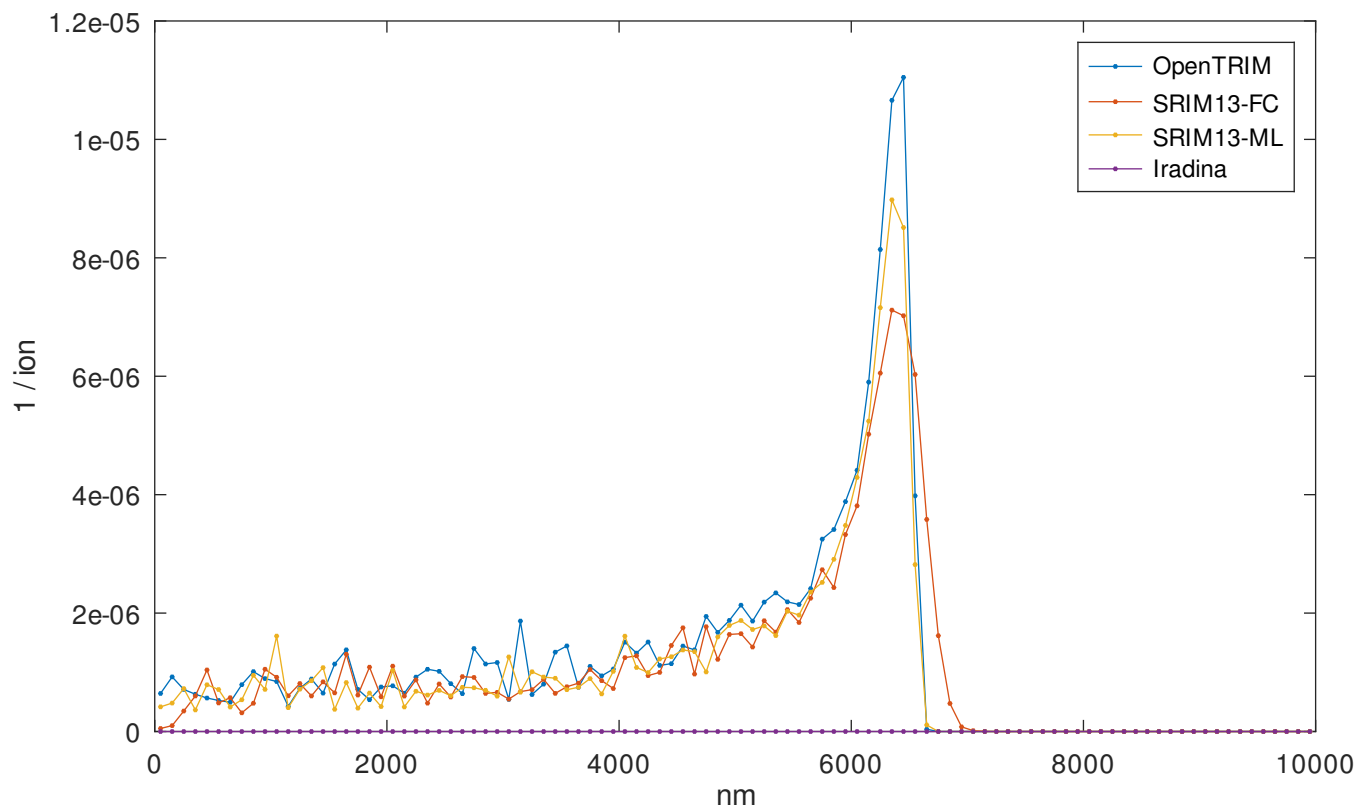
Implanted H ion



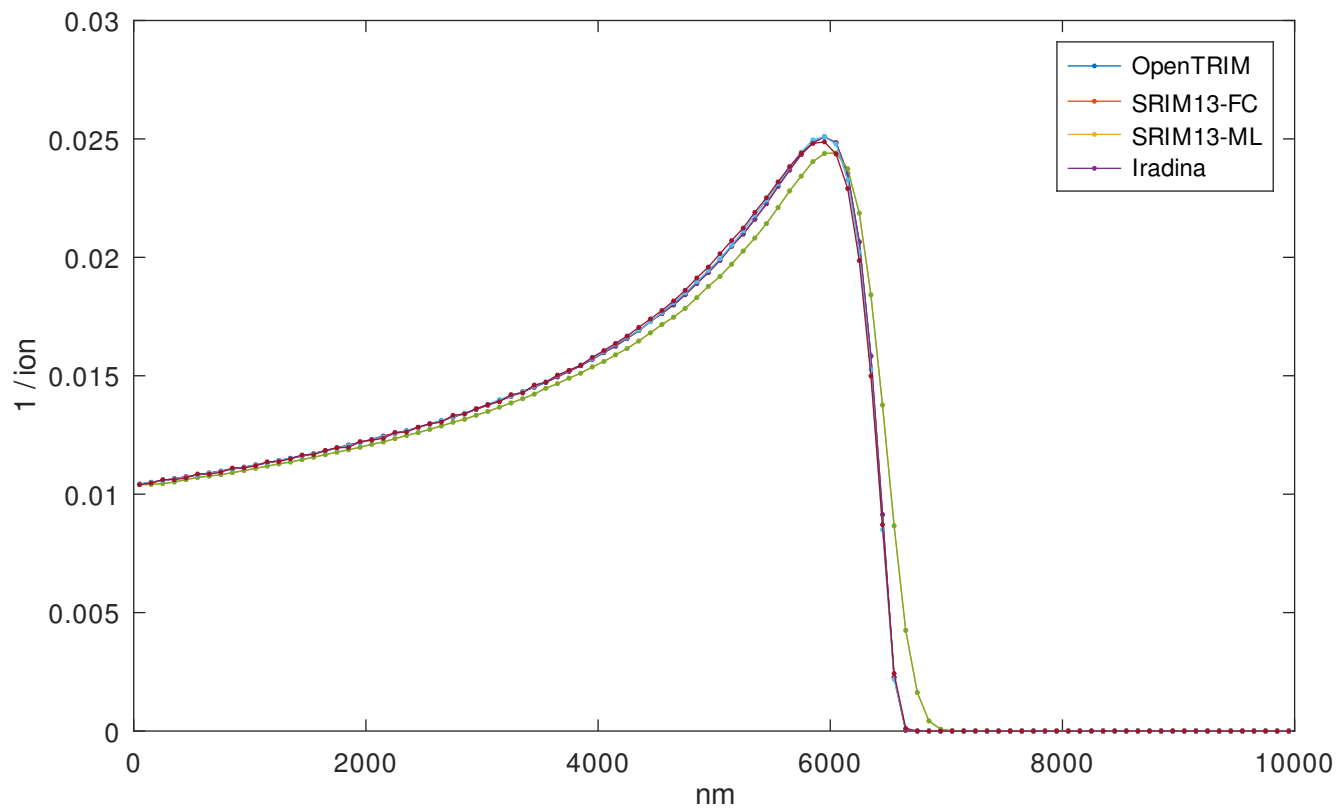
Ionization fraction E_I/E_0 by H ion



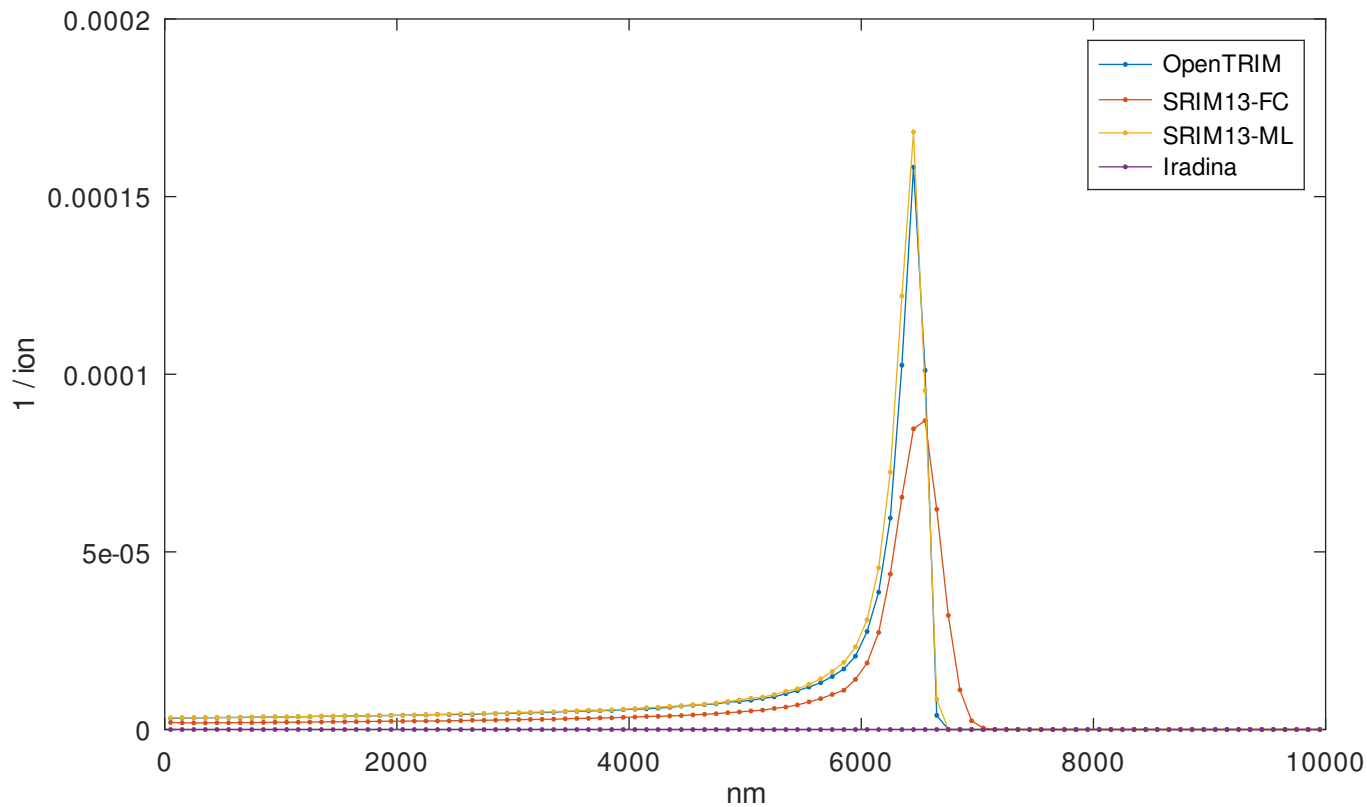
Ionization fraction E_I/E_0 by recoils



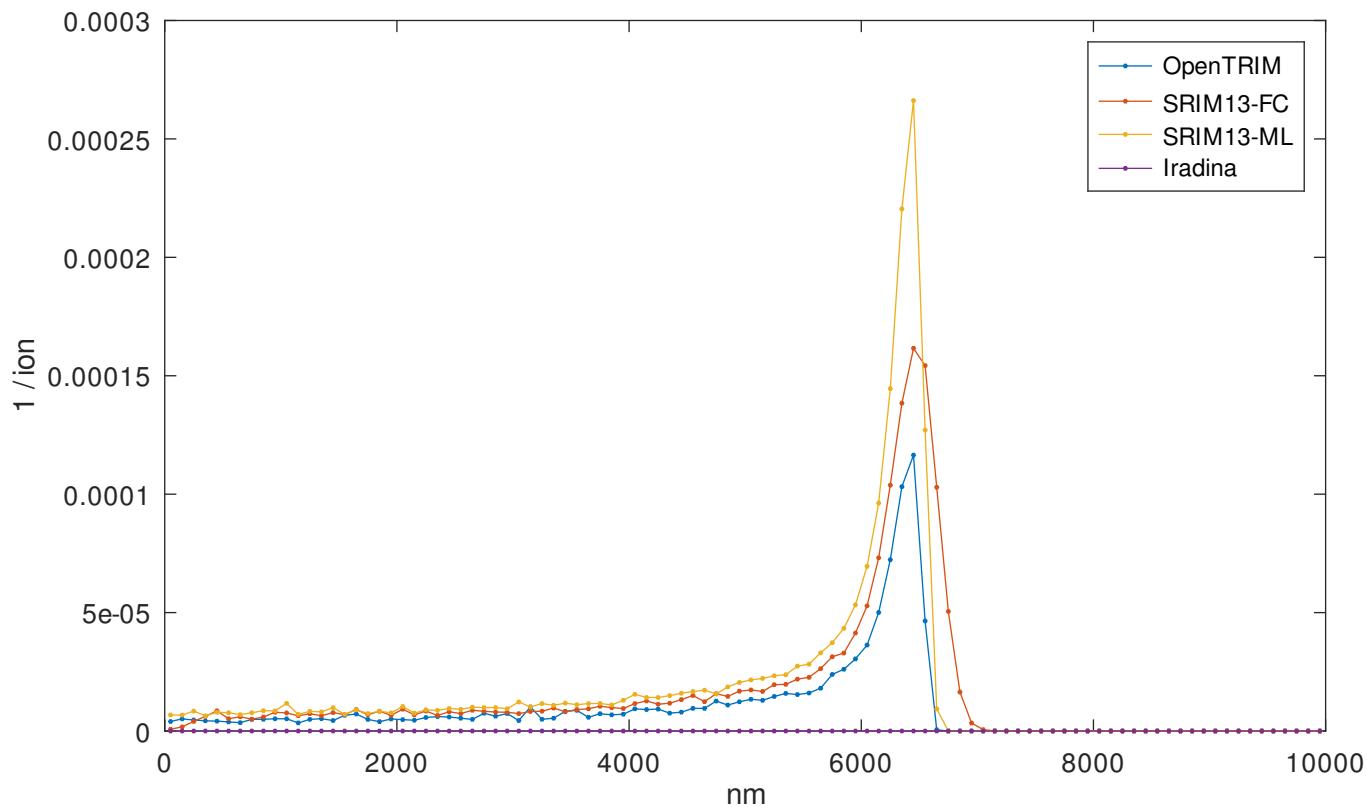
Total Ionization fraction E_I/E_0



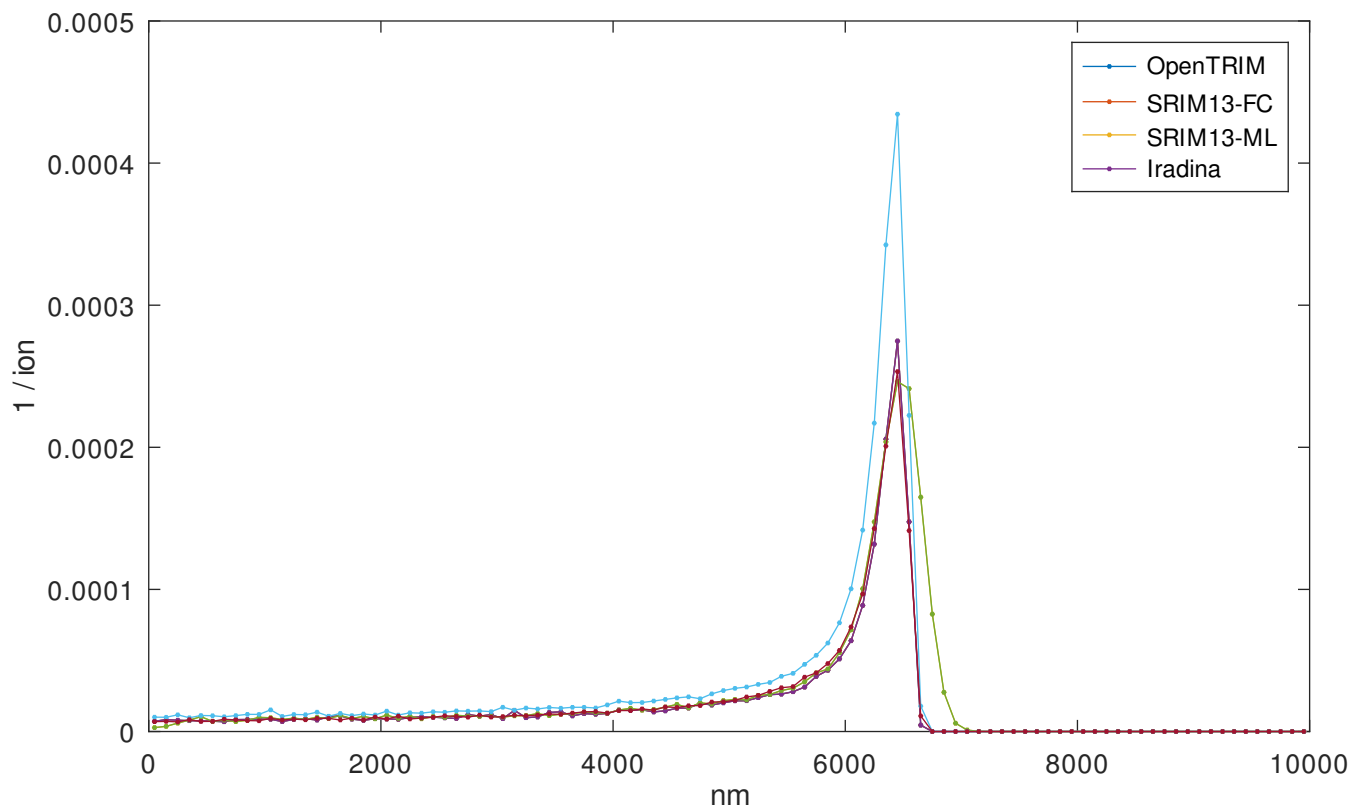
Phonon energy fraction E_{Ph}/E_0 by H ion



Phonon energy fraction E_{Ph}/E_0 by recoils



Total Phonon energy fraction E_{Ph}/E_0



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

