

Mubi Khan

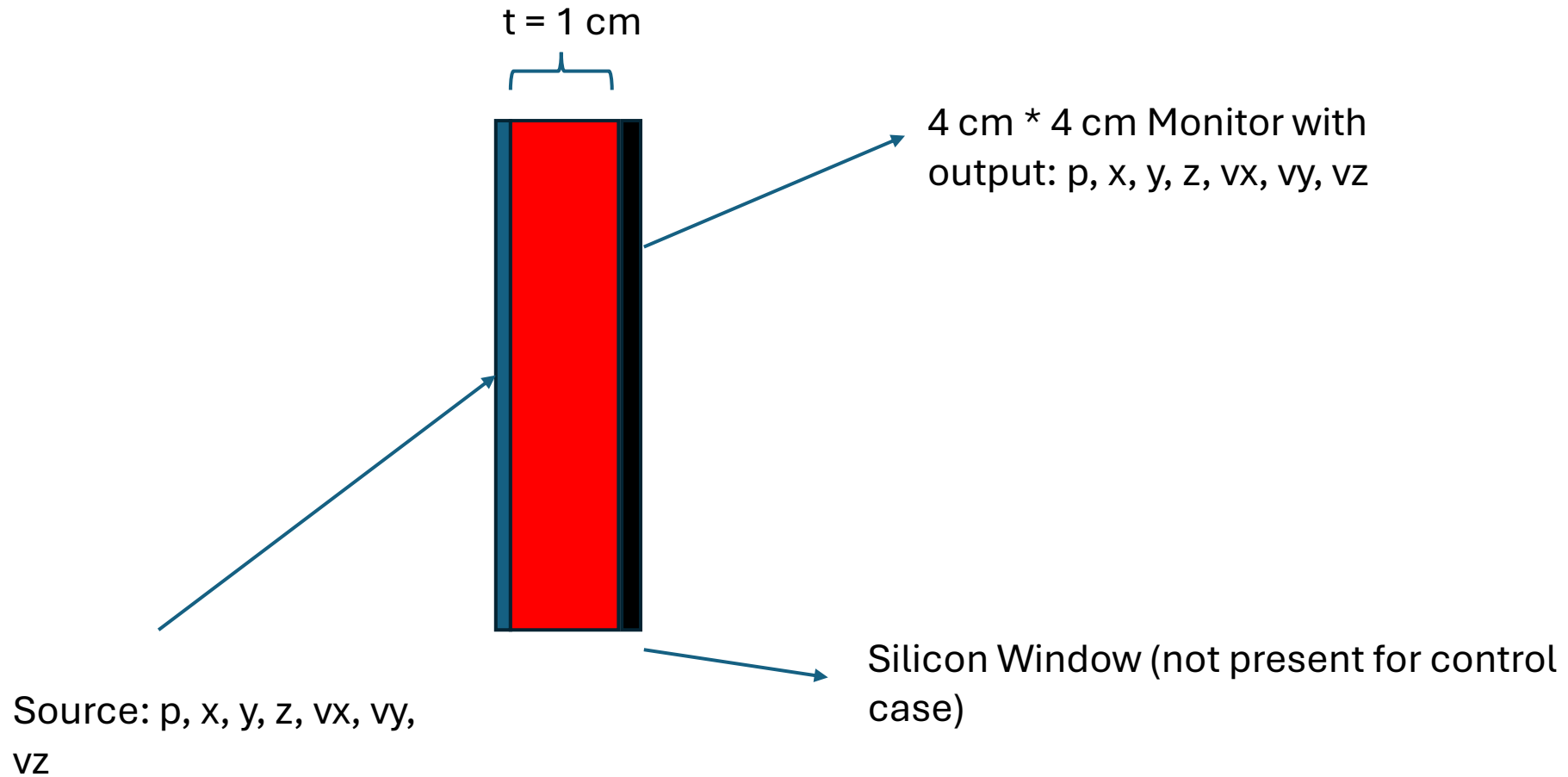
Oct 27, 2025

	Orientation	Abs(only) T	Coh(only) T	Inco(only) T	Total
McStas	Single Crystal with beam parallel to c-axis	Not included	94.08	Not included	94.08
NIST	Unknown	Included	Not included	Included	96.60

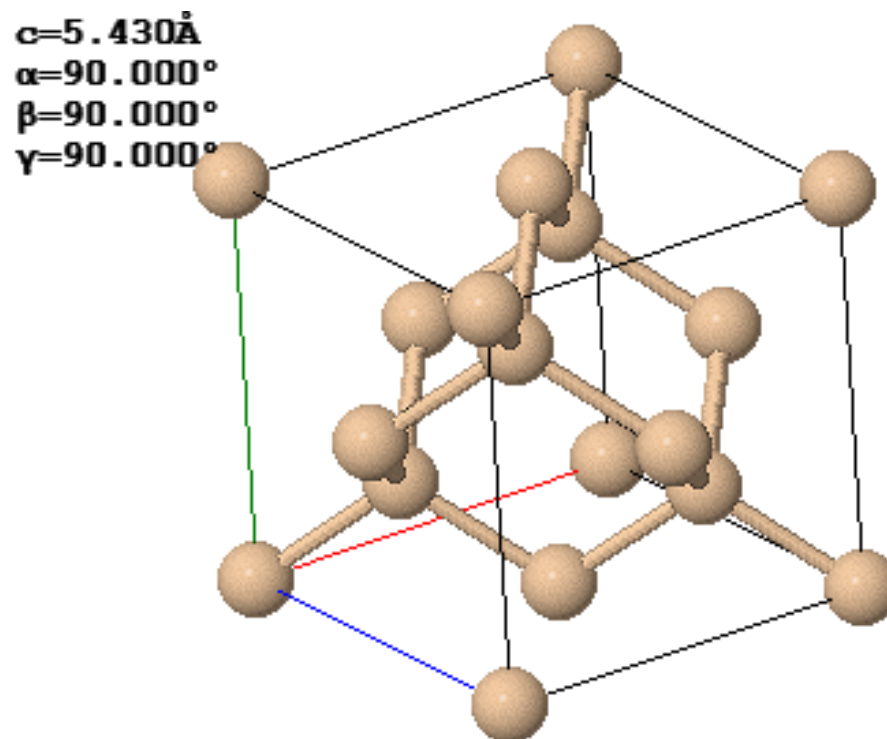
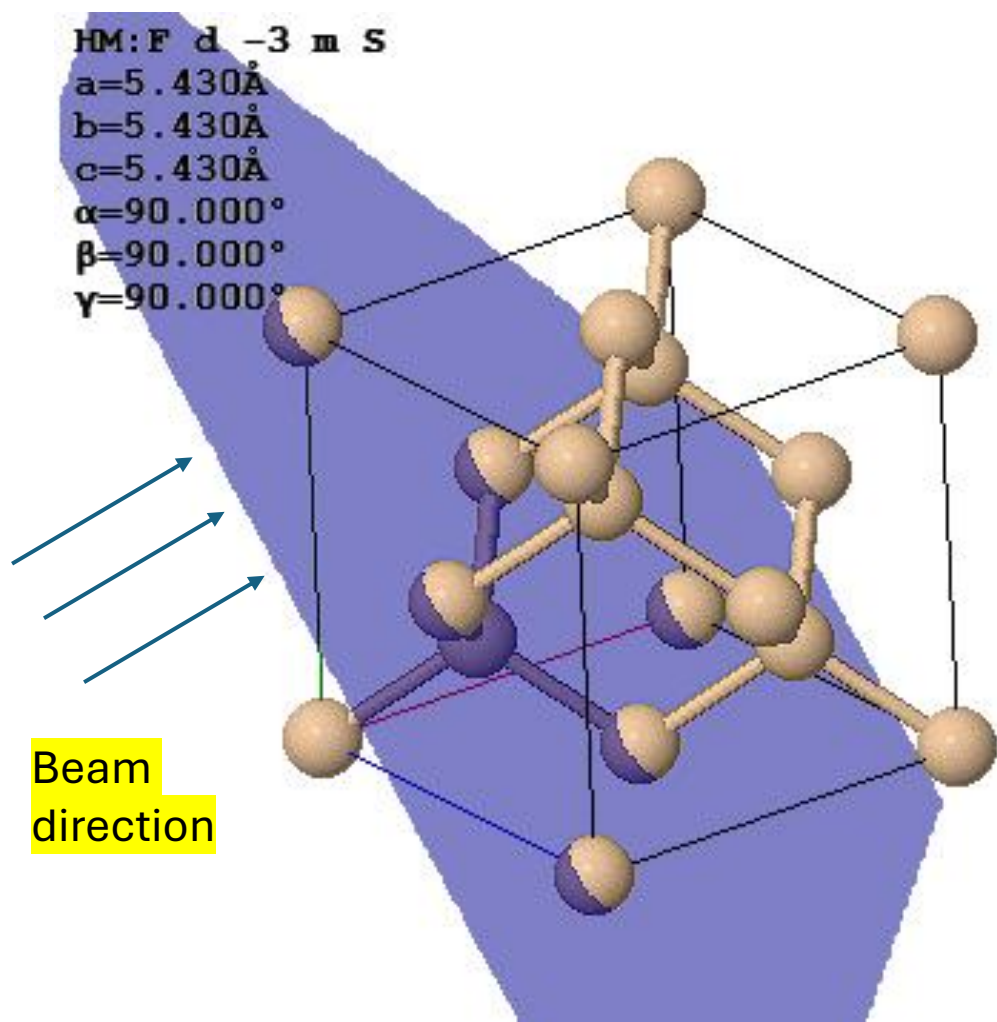
- c-axis total transmission from NIST and McStas = $0.9408 * 0.9660 = \mathbf{0.9088}$

Sapphire

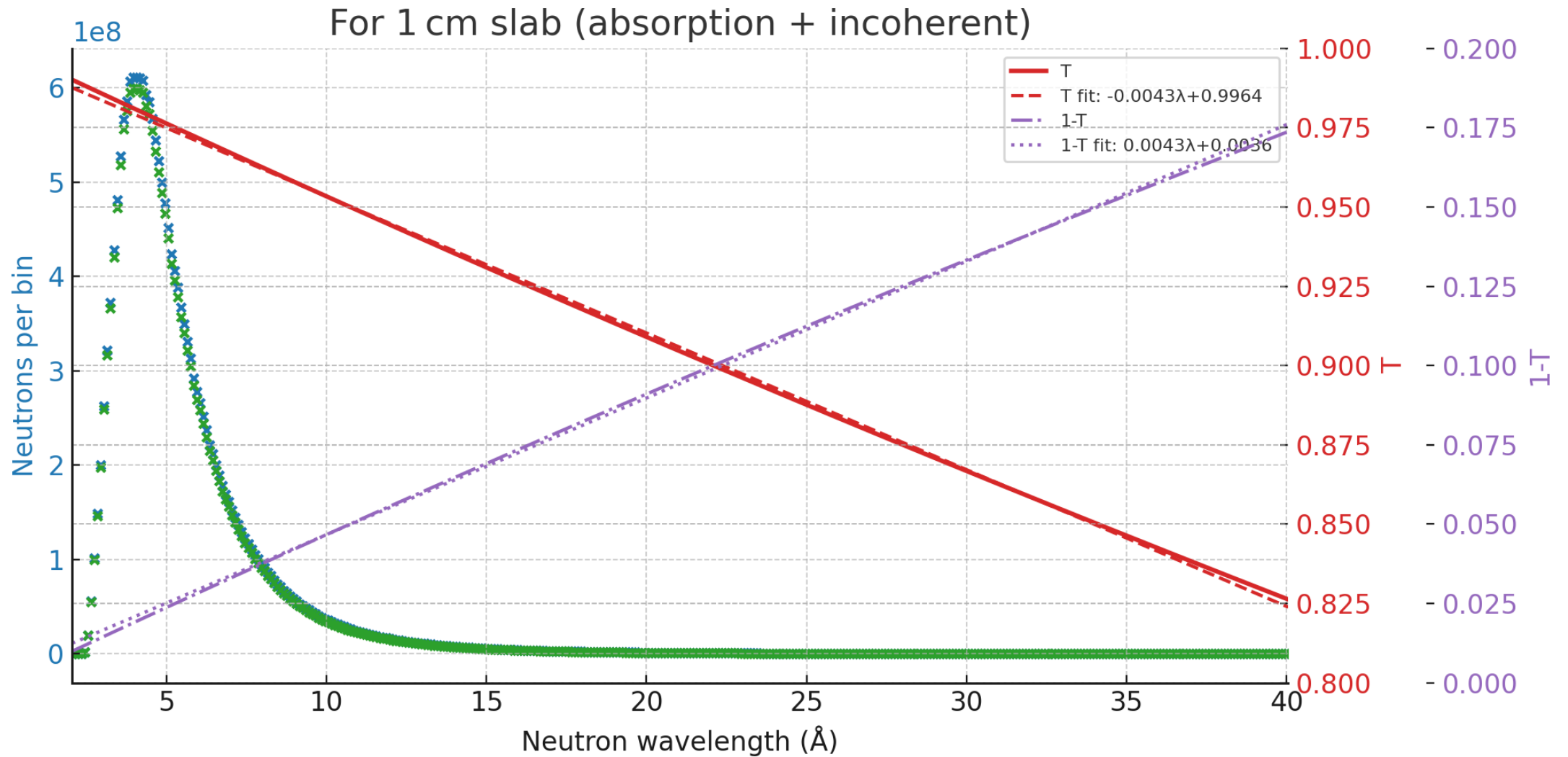
Physical Setup for Silicon



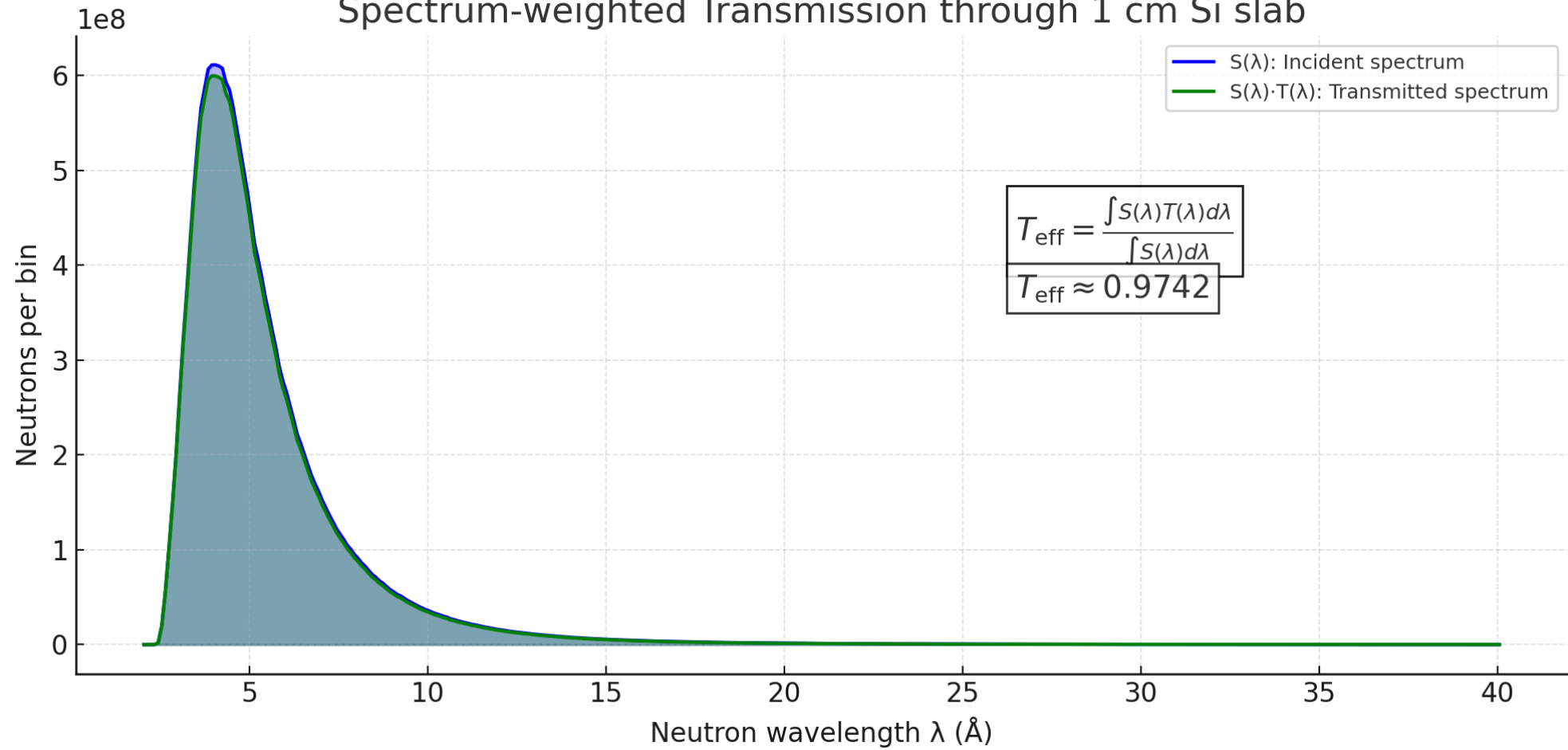
Silicon Crystal Orientation is 111 according to Lisa



Using NIST Calculator for Transmission Efficiency for Si



Spectrum-weighted Transmission through 1 cm Si slab



111

	Orientation/type	Abs(only) T	Coh(only) T	Inco(only) T	Total	
	McStas	Single Crystal (default)	Not included	95.63	Not included	95.63
111	McStas	Single Crystal with beam parallel to the [111] direction	Not included	93.62	No included	93.62
	NIST	Unknown	Included	Not included	Included	97.42

- 111 total transmission from NIST and McStas = $0.9362 * 0.9742 = \mathbf{0.9315}$

Silicon