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Multiple Scattering of Slow Ions in a Partially Degenerate Electron Fluid ROMAIN POPOFF, GILLES MAYNARD, CLAUDE DEUTSCH, LPGP UParis XI, MULSCATT COLLABORATION — We extend former investigations to a partially degenerate electron fluid at any temperature of multiple slow ion scattering at T=0. We implement an analytic and mean-field interpolation of the target electron dielectric function between T=0 (Lindhard) and T→oo (Fried-Conte). A specific attention is given to multiple scattering of proton projectiles in the keV energy range stopped in a hot electron plasma at solid density.

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