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**Stopping of Relativistic Electrons in Partially Degenerate Electron Fluid** KONSTANTIN STARIKOV, Dpt Physics KazNu Almaty, CLAUDE DEUTSCH, LPGP Université Paris XI Orsay — The stopping mechanisms of relativistic electron beams in superdense and partially degenerate electron fluid targets are investigated in framework of the fast ignitor concept for ICF. We focus attention on target partial degeneracy parameter  $\Theta = T_e/T_f$ . The target electron fluid is thus accurately modelled with a RPA dielectric function. Stopping is seen as steadily increasing with  $\Theta$ . For electron projectile energies below 2-4 MeV, according to target densities, stopping power decays a la Bethe i.e in  $1/V_p^2$ , with  $V_p$ , projectile velocity. At higher energies, stopping increases steadily with  $V_p$  in a quasi-logarithmic fashion, characteristic of the ultra-relativistic regime.

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