**Radiative Ion Cooling**, <u>E.G. BESSONOV</u>, Lebedev Phys. Inst. AS, Moscow, Russia; KWANG-JE KIM, LBL, USA - The process of Rayleigh scattering of laser light by non-fully stripped relativistic ions was suggested as a three dimensional Radiative Ion Cooling (RIC) method in storage rings [1]. In this paper we present some peculiarities of the RIC for different ions (electronic transitions) and bare nuclei (nuclear transitions) and for both nonrelativistic and relativistic cases.

[1] E.G. Bessonov, Kwang-Je Kim, Phys. Rev. Lett. (in print).