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## Plasma-photon interaction around Exotic Compact Objects

Astrophysical Compact objects are surrounded by accretion disks. The photons emitted by the accreting compact object interacts with the plasma in the interstellar medium. In this work, we investigate the dynamics of electromagnetic field propagating in the background of Exotic Compact Objects. We discuss whether or not bound states can form in the case of exotic compact object and how the frequencies of the bound states, if formed depend on the plasma profile and the background geometry.

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