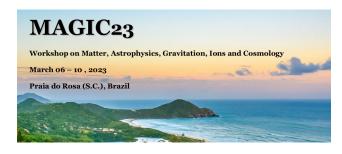
MAGIC23 Workshop (Matter, Astrophysics, Gravitation, Ions and Cosmology)



Contribution ID: 67 Type: Oral

Repeating FRBs: An Magnetospheric Origin

Fast radio bursts (FRBs) are millisecond-duration radio flashes with extremely high bright temperatures, but the origin is still unknown since the discovery in 2007 though this research field witnessed a rapid growth in the frontiers both observational and theoretical. We propose that coherent curvature radiation by bunches (maybe triggered by starquakes) in a magnetosphere of neutron star to explain FRB's radiative mechanism, i.e., the nature of narrowband radiation with time-frequency drifting, as well as a variety of polarization features. The generation of energetic charged bunches, indeed, is still a matter of debate, which is meaningful to understand the nature of repeating FRB's central engine.

Authors: WANG, Weiyang (School of Physics and KIAA, Peking University); XU, Renxin (School of Physics and KIAA, Peking University)

Presenter: WANG, Weiyang (School of Physics and KIAA, Peking University)

Track Classification: Astrophysics