

Gaps in the black hole magnetospheres

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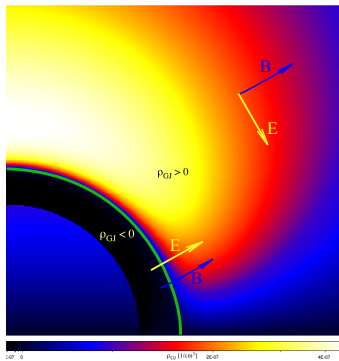
Subject: **Gaps** in the magnetospheres
of the SMBH

Goal: The presence of the gap
has clear observational signatures

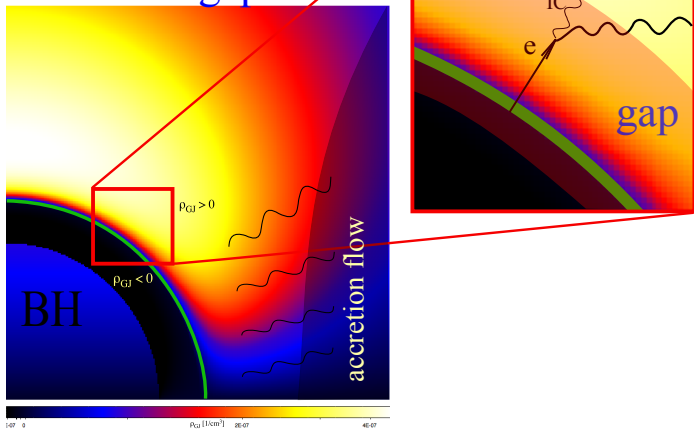
The **Gap** is a region with a lack of charge density

Motivation:

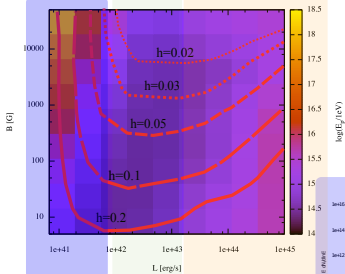
observations:
fast variability
|
acceleration region
 $\sim R_{\text{horizon}}$
|
Gap



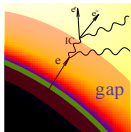
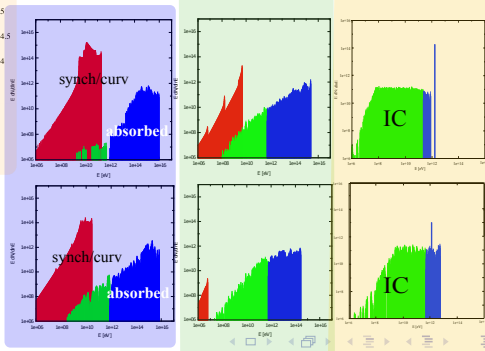
Method: numerical modelling
of particle propagation
and radiation
in the **gap**



Gap height



Spectra of emission from electrons in the gap



Conclusions:

testing the gap model -

looking for the sharp features
appearing in the broader/smoother jet spectra