Poster II-14

## Evolution of an Accretion Disk in Binary Black Hole Systems



S.S. Kimura, S.Z. Takahashi, & <u>K. Toma</u> (Penn State U) (Tohoku U)

(MNRAS submitted; arXiv:1607.01964)

Changes Pini Hanges Pini Hange

Perna et al. (2016) claimed that such a disk will become MRI dead, and reactivates a few seconds before the merger producing a short gamma-ray burst.



We carefully consider the tidal truncation of the disk (Paczynski 77; Papaloizou & Pringle 77), and find that the dead disk cannot be so massive as to produce short GRBs.



(t<sub>mer</sub> - t) [s] But the emissions from jet and forward shock could be detectable by current instruments.