

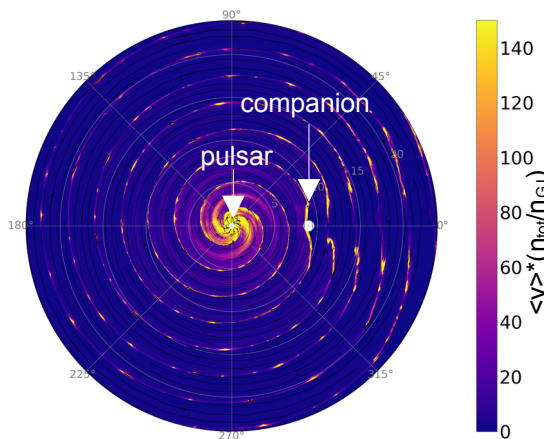
Context



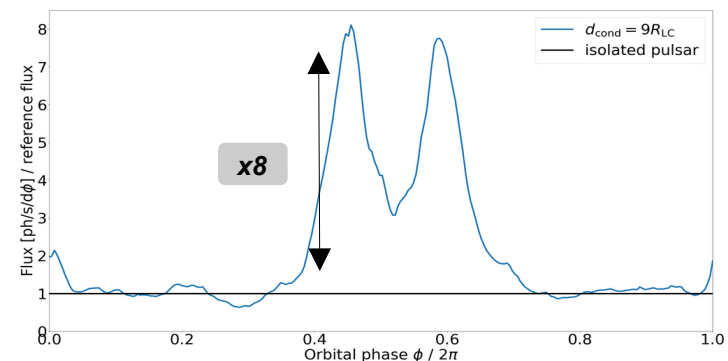
Credit: Carl Knox, OzGrav-Swinburne University

Electromagnetic precursor ?

Results - 2D equatorial PIC simulations

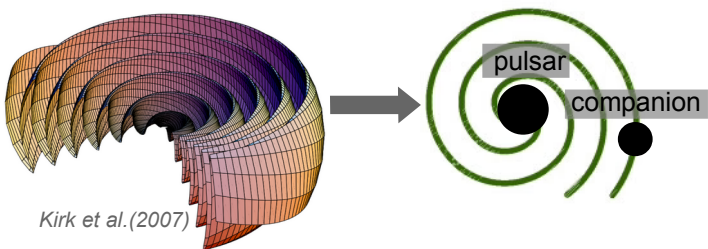


Particle acceleration



High-energy lightcurves

1st step: pulsar-companion



Kirk et al. (2007)

3D view of the current sheet

Parametric study: separation and radius of the companion

Conclusions and prospects

- Promising results:
 - enhanced particle acceleration
 - significant increase of the non-thermal radiation
- Next step: BH-NS interaction in GRPIC