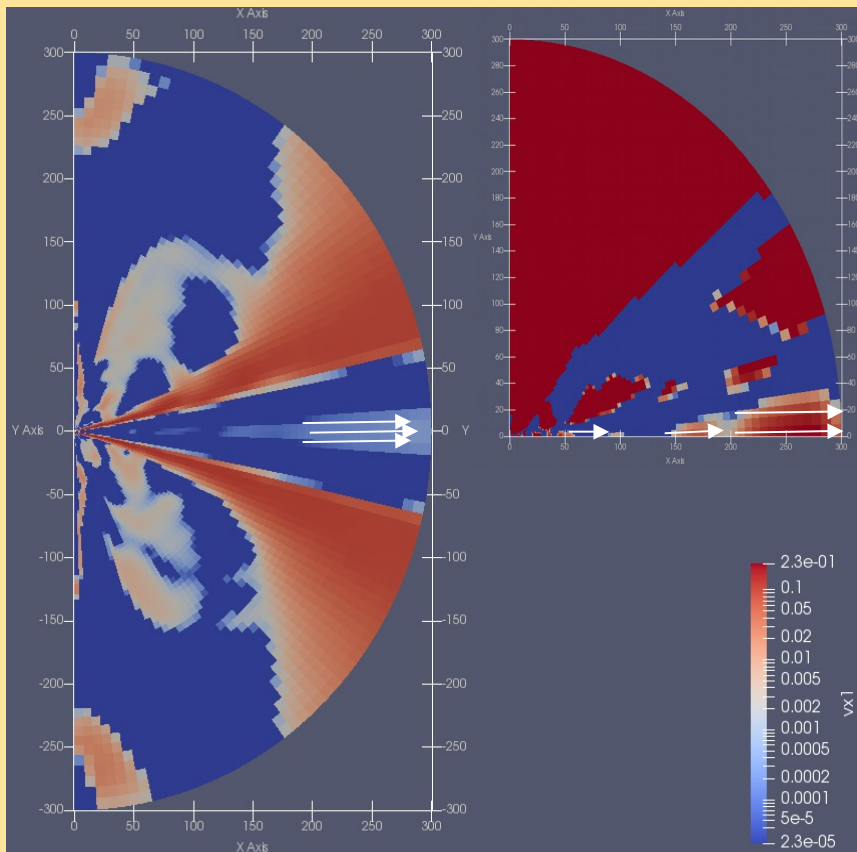


Current Team

- **Włodek Kluźniak**
- **Miljenko Čemeljić** (PLUTO code)
- **David Abarca** (GRRMHD KORAL code) [Ph.D. student]
- **Deepika Bollimpalli** (GRRMHD COSMOS++ code) [Ph.D. student]
- **Ruchi Mishra** (PLUTO code) [Ph.D. student]
- **Aleksandra Kotek** (PLUTO code) [Bachelor's/Master's student]

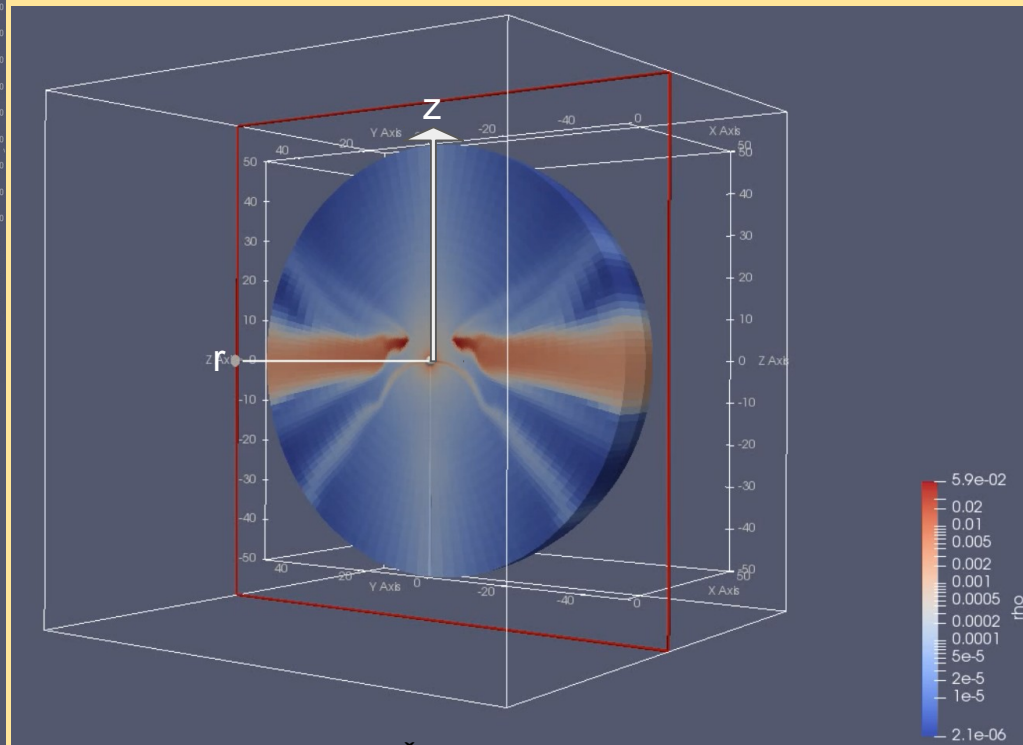
1a) Backflow in the disk

Radial velocity(>0) in HD simulations (left) and in MHD simulations (right). (PLUTO code; MČ, R. Mishra)

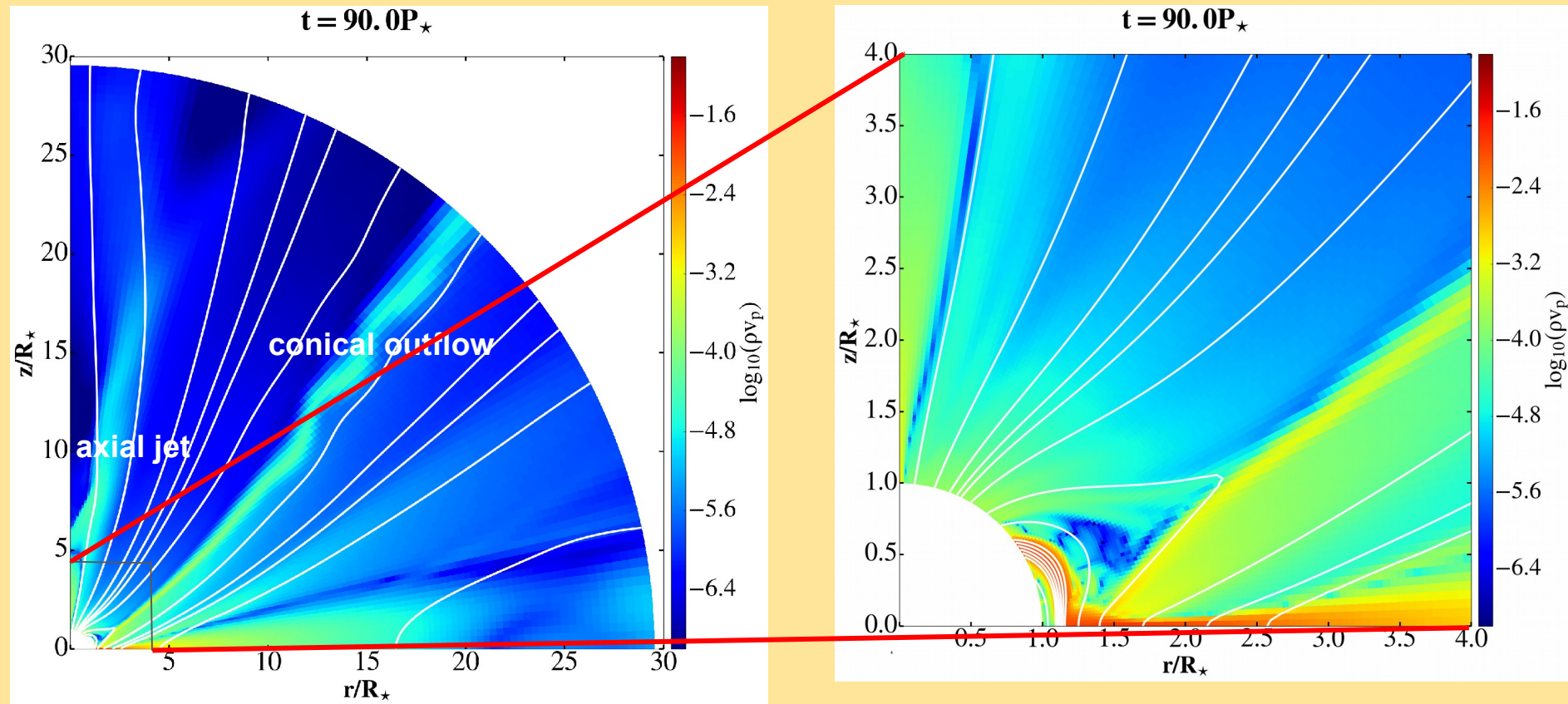


1b) Are the results from 2D viscous and resistive MHD simulations maintained in 3D simulations?

Density in the disk and outflows in 3D MHD simulations. (PLUTO code; MČ)



1c) Jets and outflows in star-disk magnetospheric interaction (PLUTO code; MČ, A.Kotek)



Momentum in the MHD simulation in the young stellar object with conical outflow and axial jet. Right panel is a zoom into the left panel close to the star, to show the closest vicinity of the star.