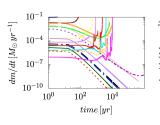
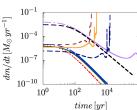
## JAYANTA DUTTA (HRI ALLAHABAD, INDIA)

## N-body simulation on survival possibility of Population III stars

- $\bullet$  Non-linear gravitational collapse of gas  $\to$  Disk fragmentation and formation of Population III star-cluster
- What are the fate of these stars?? blackhole or supernovae or merge or survive upto present epoch ??
- Evolving protostars are assumed to follow the Bondi-Hoyle accretion
- Dynamics of these protostars (via N-body simulation) with ambient medium





Dutta et al., ApJ, 901, 16, 2020 Sharda et al., MNRAS, 490, 513, 2019 Dutta, J., A&A, 585A, 59D, 2016 Becerra et al., MNRAS, 446, 2380, 2015

Thank you