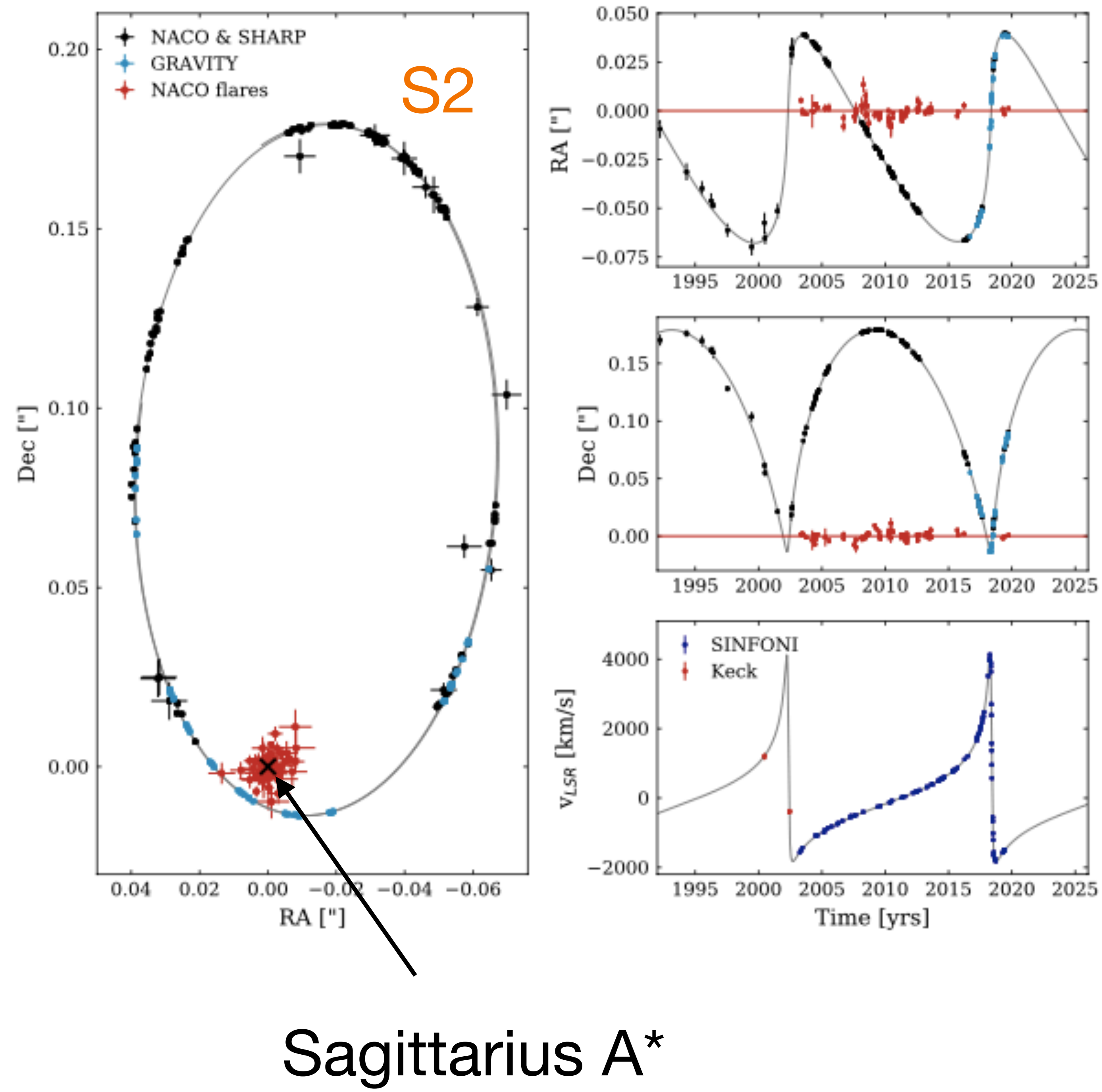
- Several **spherically symmetric distributions** have been tested by **GRAVITY** collaboration (Plummer, power-law, scalar and vector clouds…) and **mass limits** have been obtained.

- However, matter orbiting a central body tends to flatten, forming **a disk** (rings of planets, cluster of stars, accretion disks, black holes…)



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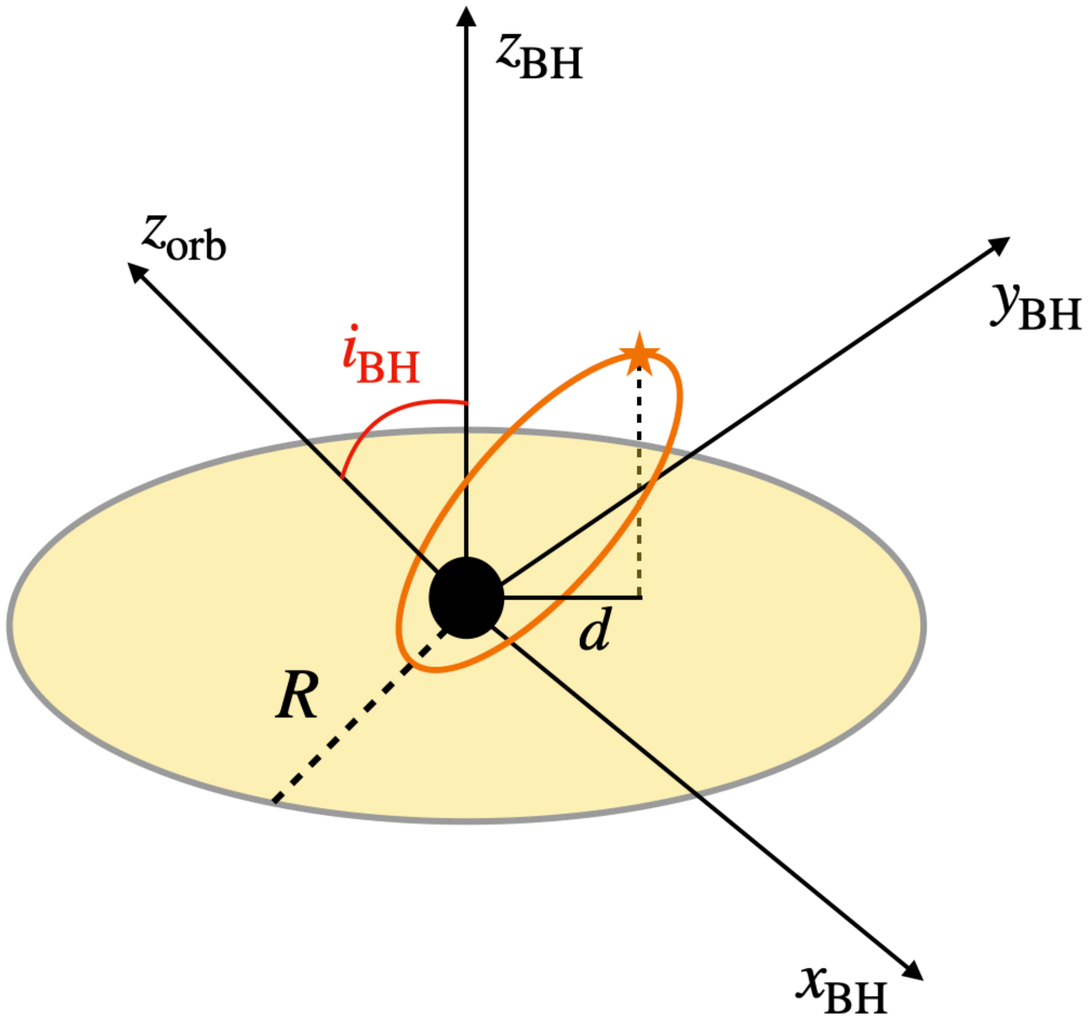
↓

For the first time we study a planar matter distribution around Sagittarius A* to check the effects on S-stars and derive **new mass upper limits**.



i_{BH} plays an **important** role.

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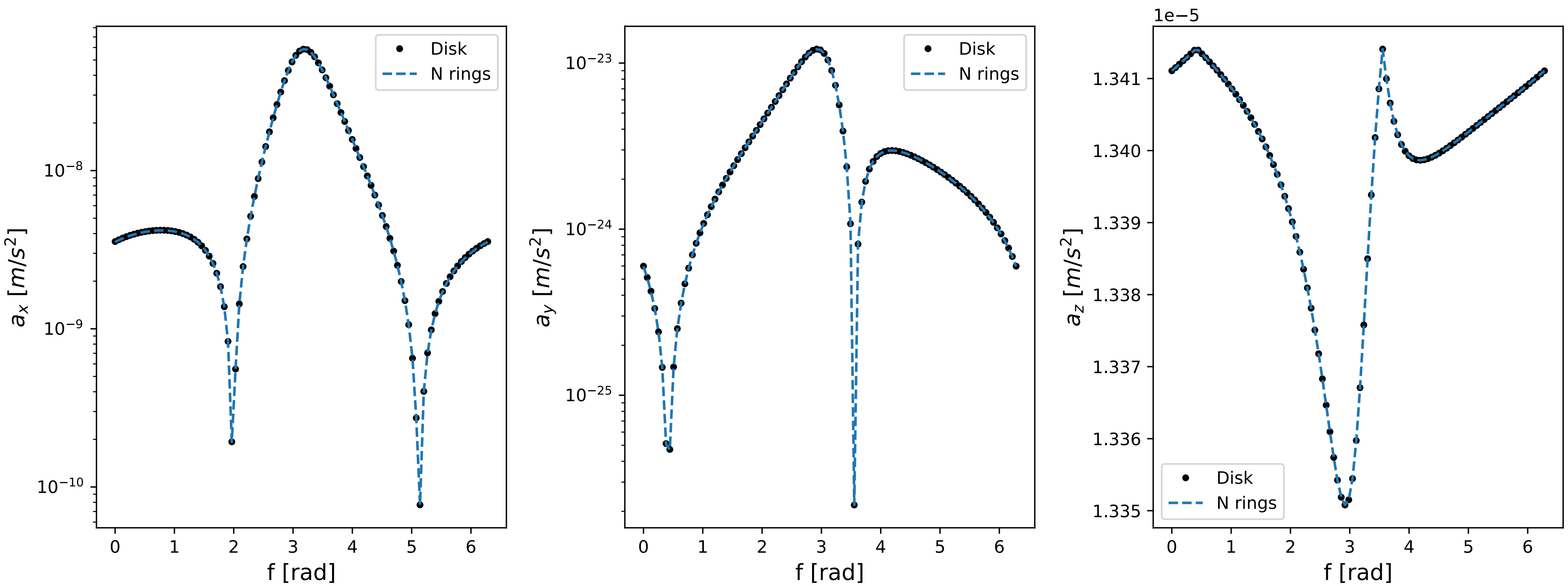
2. Simulate a more realistic scenario where $M(r) = M_0 \left(\dfrac{r}{r_0}\right)^{3-\delta}$.
3. Firstly, **uniform disk** vs N **uniform rings** $\rightarrow$ **convergence** for $N \gg 1$



$$i_{\rm BH} = \frac{\pi}{2}$$

$$N = 10^6$$

... Thank you and stay tuned!