MAPPING THE "X-SHAPED" STRUCTURE IN THE GALACTIC BULGE BAR

Zhao-Yu Li (Shanghai Astronomical Observatory) Collaborator: Juntai Shen (SHAO)



Li & Shen 2012 $\begin{array}{c}
 2 \\
 0 \\
 -2 \\
 -2 \\
 -2 \\
 -10 \\
 -5 \\
 X (kpc)
\end{array}$

- Observational evidence of an X-shaped structure can be reproduced in the edge-on disk with a side-on bar, which has similar radial and vertical extensions as the X observed in the Galaxy.
- X-shape is more peanut-like, mainly shaped via the bar buckling instability.



The morphology transitions from a central boxy core to a peanut bulge and an extended thin bar.

Li & Shen 2015