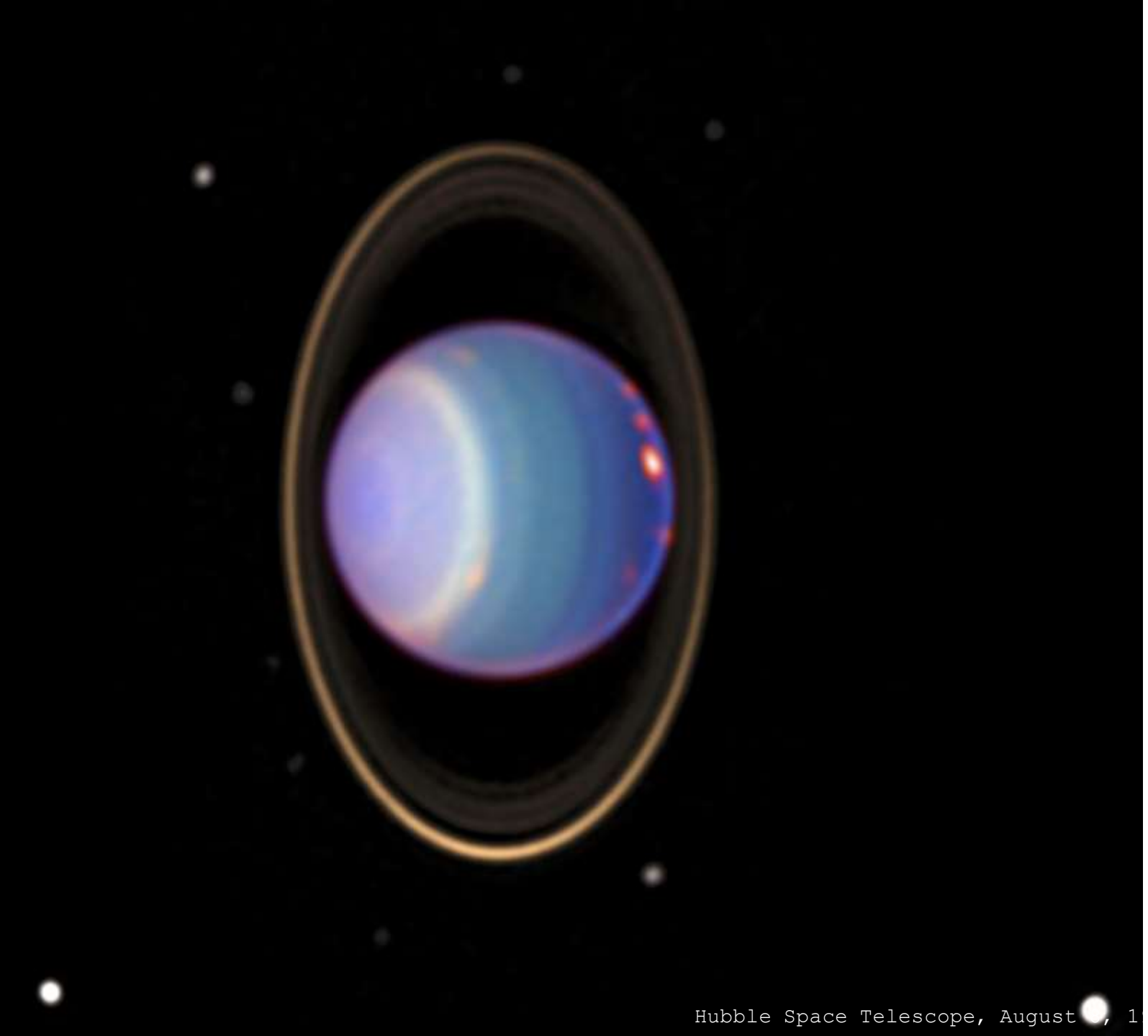
Die Eisriesen: Ein Blick auf Uranus und Neptun

Bendeguz Borbely-Ipkovich



Uranus

- $J_2 = 3551 \times 10^{-6}$

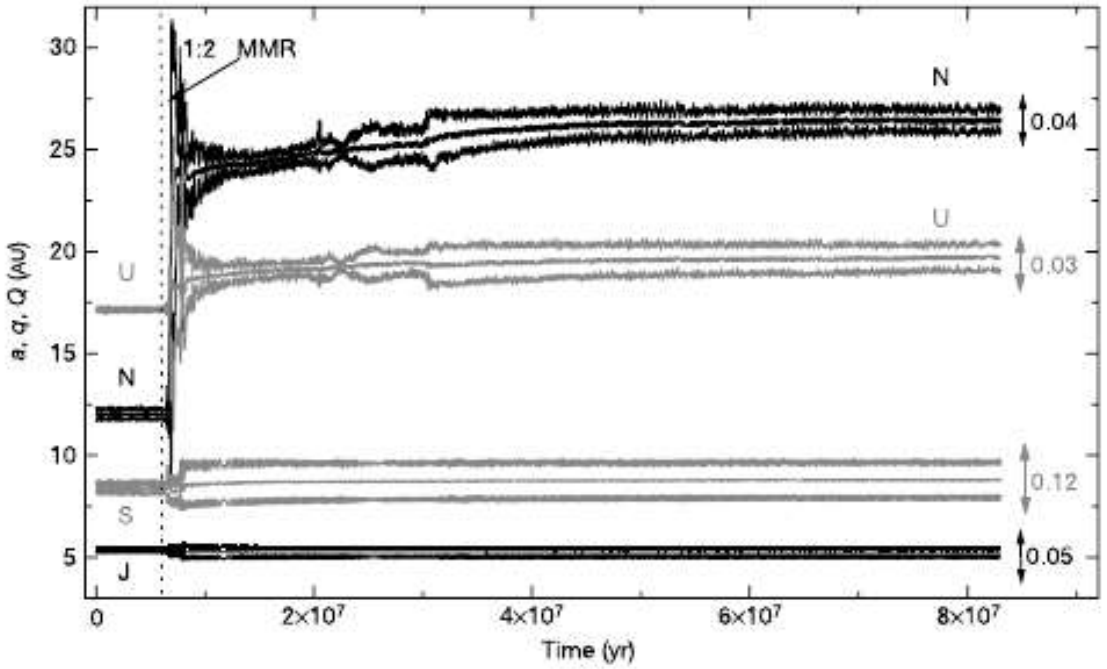
Neptun

- J_2 = 626 × 10^-6

Voyager 2, 02/16/

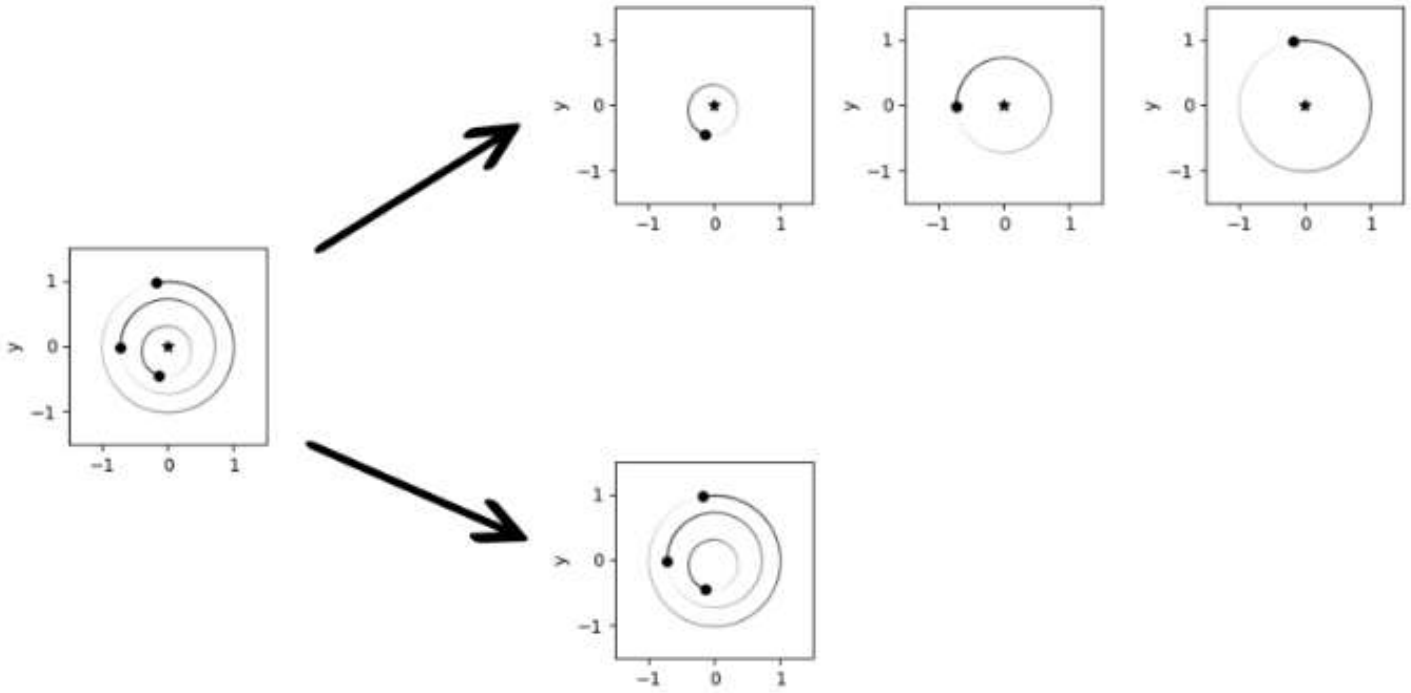
Entstehung des Sonnensystems - Nice Model

Observatoire de la Côte d'Azur



K. Tsiganis et al. (2005)

WHFast



J.F.F. Jonkers Bachelor The

$$\mathcal{H} = \frac{\mathbf{p}_0'^2}{2m_0'} + \sum_{i=1}^{N-1} \frac{\mathbf{p}_i'^2}{2m_i'} - \sum_{i=1}^{N-1} \frac{Gm_i'M_i}{|\mathbf{r}_i'|} + \sum_{i=1}^{N-1} \frac{Gm_i'M_i}{|\mathbf{r}_i'|} - \sum_{i=0}^{N-1} \sum_{j=i+1}^{N-1} \frac{Gm_im_j}{|\mathbf{r}_i - \mathbf{r}_j|}. \quad (2.10)$$

Vielen Dank für Ihre Aufmerksamkeit!

Quellen

- Dálya, Gergely (2021): Bevezetés a csillagászatba. Budapest: Csillagászati és Földtudományi Kutatóközpont
- Neuenschwander Benno A., Ravit Helled (2022): Empirical Structure Models of Uranus and Neptune
- Nesvorny et al. (2011): LATE ORBITAL INSTABILITIES IN THE OUTER PLANETS INDUCED BY INTERACTION WITH A SELF-GRAVITATING PLANETESIMAL DISK
- Nesvorny, Morbidelli: STATISTICAL STUDY OF THE EARLY SOLAR SYSTEM'S INSTABILITY WITH 4, 5 AND 6 GIANT PLANETS
- WHFast: A fast and unbiased implementation of a symplectic Wisdom-Holman integrator for long term gravitational simulations
- R. Gomes et al. (2005): Origin of the cataclysmic Late Heavy Bombardment period of the terrestrial planet
- K. Tsiganis et al. (2005): Origin of the orbital architecture of the giant planets of the Solar System