RW Aur A
- Physically bound with RW Aur B (semi-major axis 200 au)
- Age: 10 Myr
- Distance: 140 pc
- Mass: 1.4 solar masses
- Active accretion disk

Chandra images

Optical and Chandra lightcurve

Chandra spectra: Vastly different every time we look

Green: hot plasma (here: flare on RW Aur) peaks at 6.7 keV
Black: Fe feature peaks at 6.63 +/- 0.03 keV
→ Relatively cool plasma with high Fe abundance

In the spectrum we observe: between 2013 and 2017
- emission at high energies multiplies
- absorbing column density $N_H$ increases from $1 \times 10^{21}$ to $4 \times 10^{23}$ cm$^{-2}$
- Fe abundance in corona increases from 0.5 to 15 times solar

Absorber
- Optical extinction is gray → thick absorber or large grains
- $N_H/A_V$ skyrockets: gas rich absorber? (or at least non-ISM grains)

We infer a large supply of Fe rich, large grains in the inner disk.

Where does it come from?

Ideas:
1) Break up planetesimal with Earth-like Fe core (e.g. due to collision).
2) Collect dust in dust trap, then release due to some massive disturbance in the inner disk.