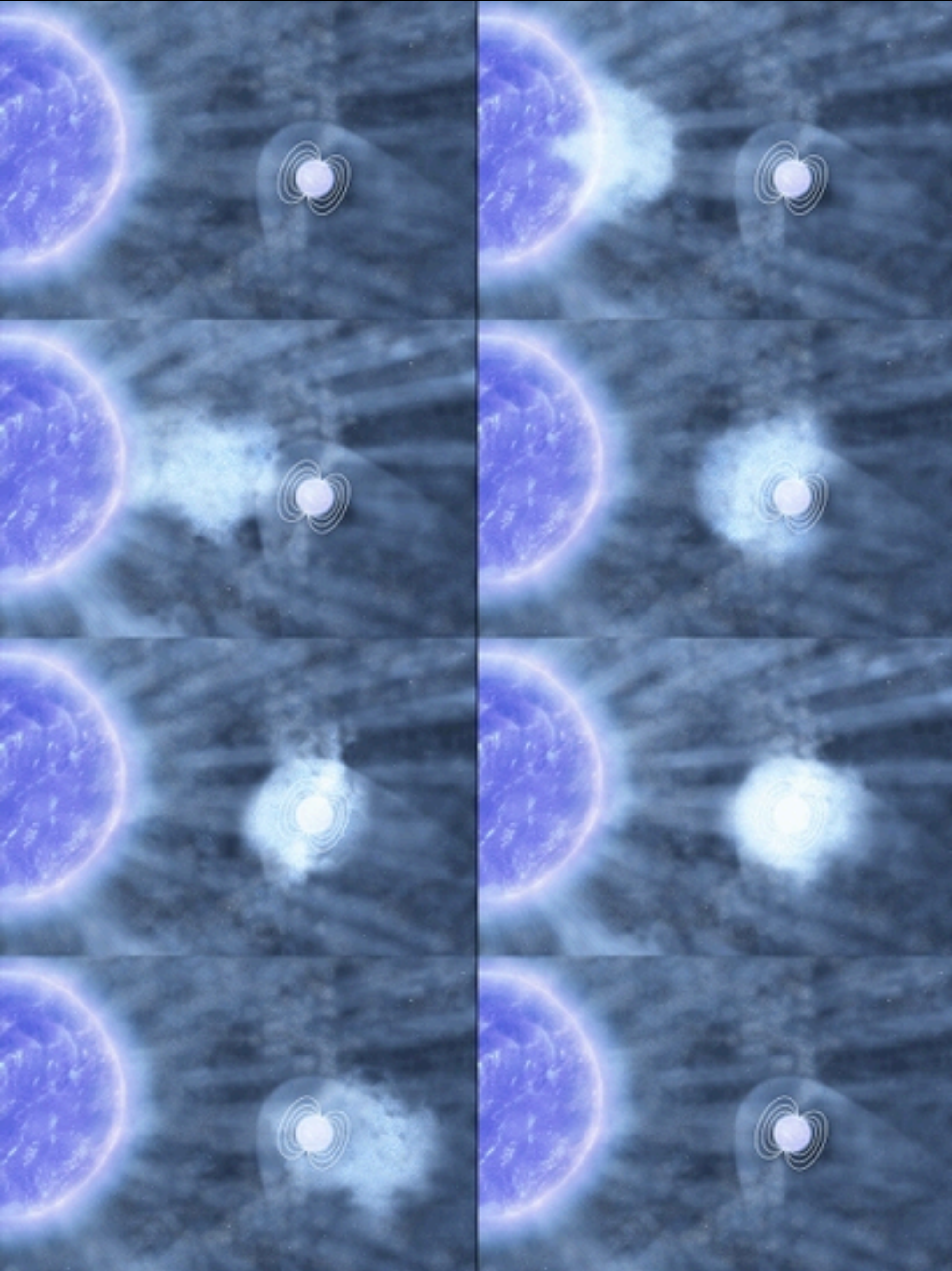


SFXT - Supergiant Fast X-ray Transient



- HMXB: compact object accretes the clumpy wind from supergiant companion
- Bright X-ray short flares: dynamic range ≥ 10 , duration ~ 1000 s
- Average luminosity $L \lesssim 10^{34} \text{ erg s}^{-1}$
- Possible models:
 - extremely clumpy winds (in't Zand 2005): clump masses $\sim 10^{21} - 10^{23} g$,
 - centrifugal or magnetic gates (Grebenev 2008; Bozzo et al. 2008):
 $B \sim 10^{12} G$, $P_{spin} \sim 10 s$ or $B \sim 10^{14} G$, $P_{spin} \gtrsim 1000 s$,
 - quasi-spherical subsonic settling accretion (Shakura et al. 2012):
 $L_X \lesssim 4 \times 10^{36} \text{ erg s}^{-1}$

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- Discovered by INTEGRAL (Walter et al. 2004)
- Orbital period $P_o = 3.945 \pm 0.005$ d (Cusumano et al., 2016)
- Eclipsing HMXB, duration $\sim 3.5\%$ of P_o (Cusumano et al., 2016)
- Blue Supergiant **ON9.7Iab** companion star (Coleiro et al., 2013)
- Distance $\sim 5\text{-}15$ kpc (Tomsick et al., 2006)