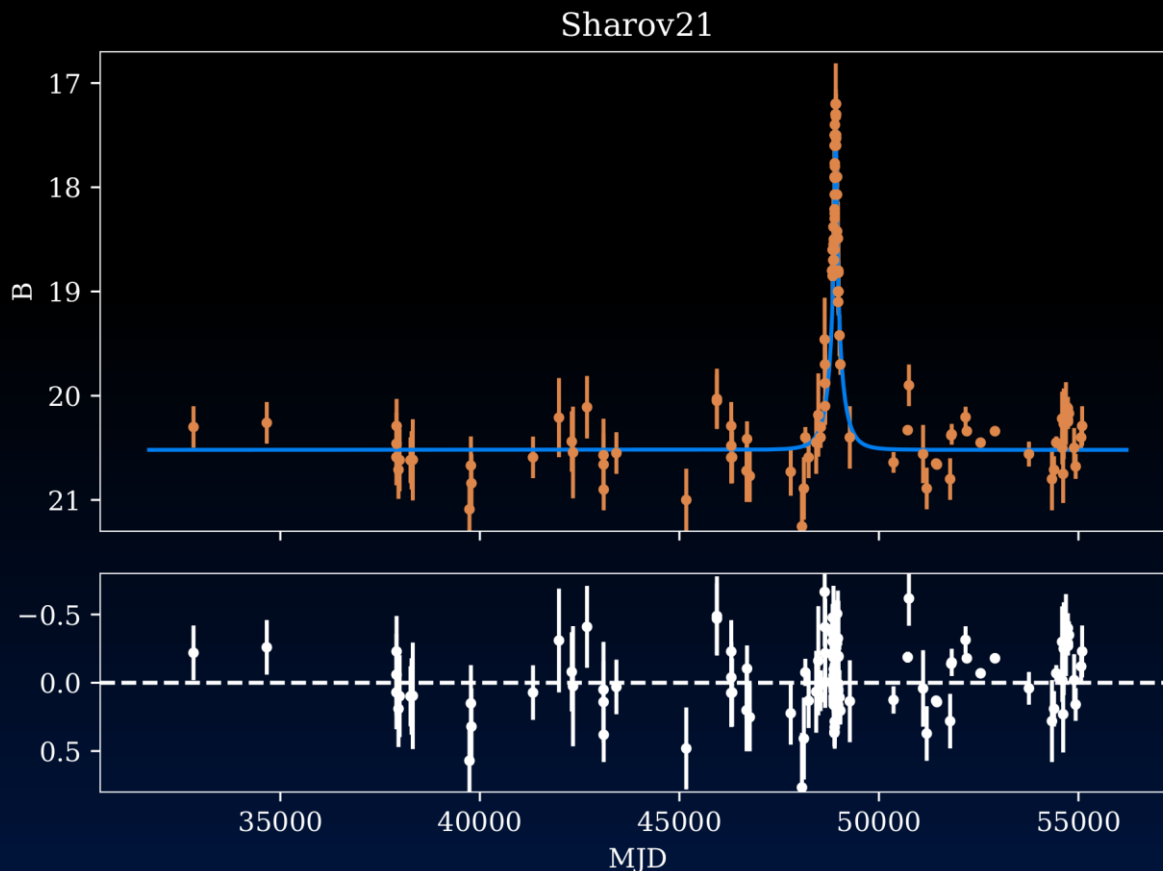


First reported as a nova
in Sharov (1998).

Meusinger (2010) later
confirmed AGN transient.

Isolated flare event in
decades-long light curve.

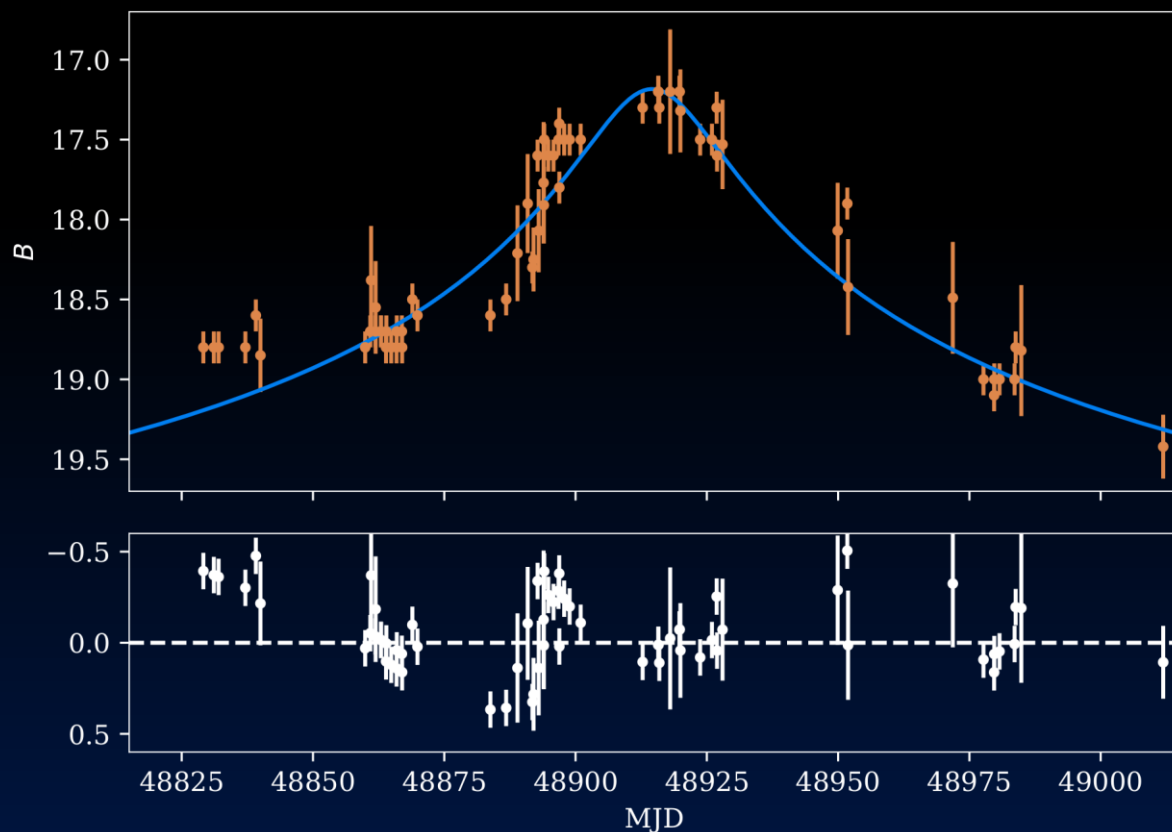
Micro or tidal flare?



Armed with light curve data, assuming simple
microlensing model and stellar-mass lens,
MCMC analysis provides lens distance
estimate in agreement with Andromeda Galaxy.

Micro wins?

Sharov21 Zoom



Colour change?

Micro model = no; Meusinger (2010) = yes

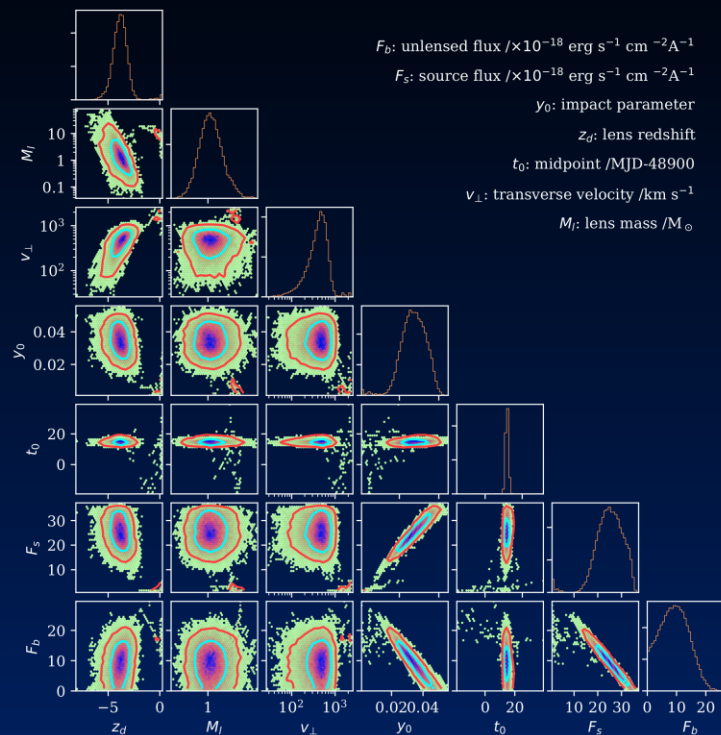
Evidence for colour change not convincing

Light curve structure?

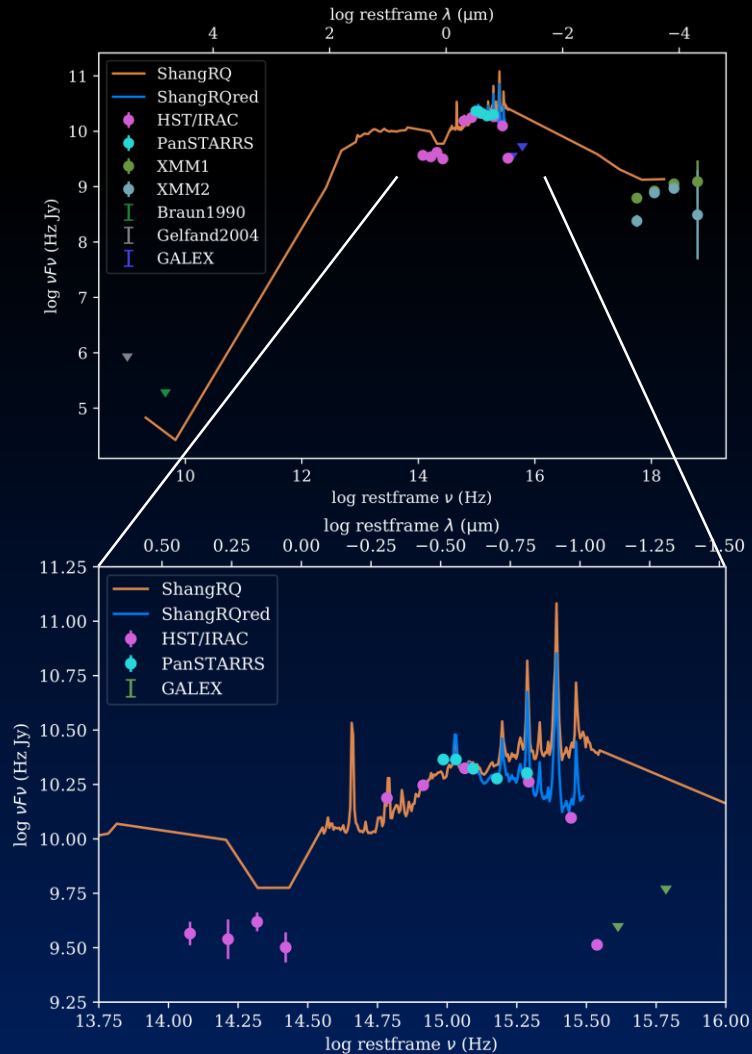
If correct, model (and DRW) struggle to explain
Photographic plate data errors may be too small

MCMC results:

Sharov21		$z_{\text{agn}} = 2.109$
parameter	value	unit
$\log_{10}(z_d)$	$-3.82^{+0.63}_{-0.67}$	
M_l	$1.26^{+2.39}_{-0.79}$	M_{\odot}
v_{\perp}	420^{+205}_{-192}	km s^{-1}
y_0	$0.0343^{+0.0077}_{-0.0075}$	θ_E
t_0	$48915.7^{+0.9}_{-0.9}$	MJD
F_s	$2.52^{+0.55}_{-0.54}$	$\times 10^{-17} \text{erg s}^{-1} \text{cm}^{-2} \text{\AA}^{-1}$
F_b	$9.20^{+5.14}_{-5.30}$	$\times 10^{-18} \text{erg s}^{-1} \text{cm}^{-2} \text{\AA}^{-1}$
r_E	1260^{+2780}_{-860}	light-days



SED appears 'normal'



Sharov21 may just be the first. Enter Sharov '22':

- Spectroscopically confirmed AGN, $z \sim 0.2$
- Event appears isolated (& chromatic)
- Possible binary AGN [Dorn-Wallenstein (2017)]
But doubtful [Barth & Stern (2018)]
- Microlensing model also works
Points towards possible resolving of BLR/AD

