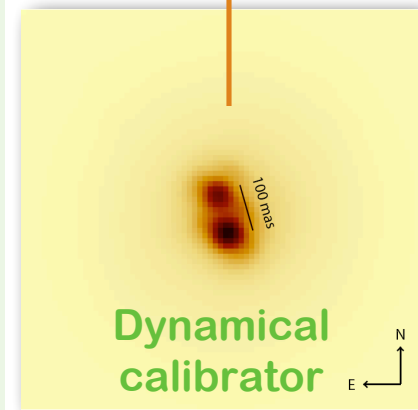
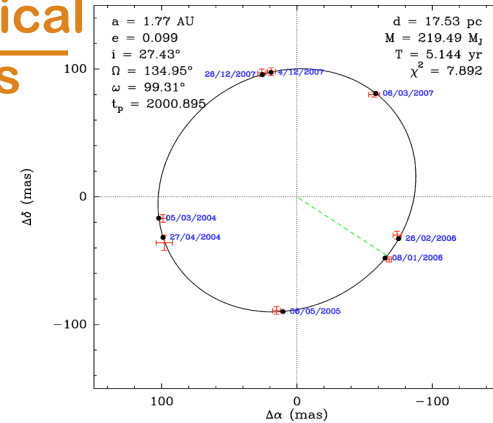
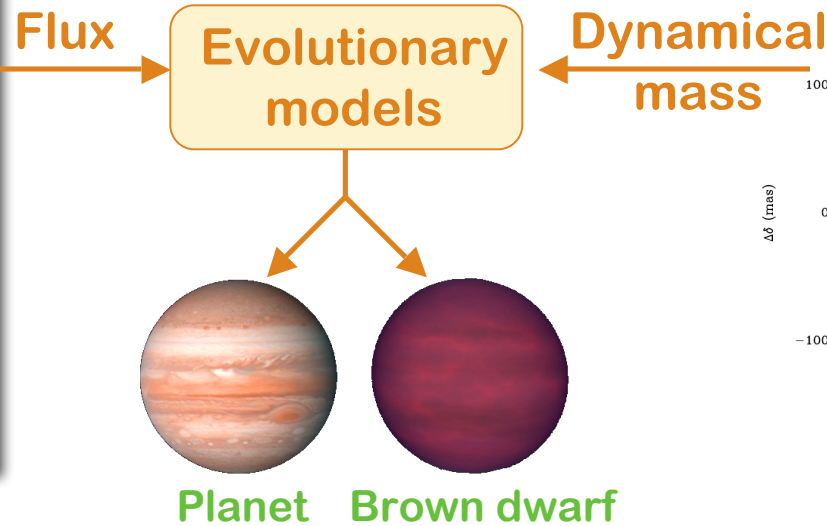
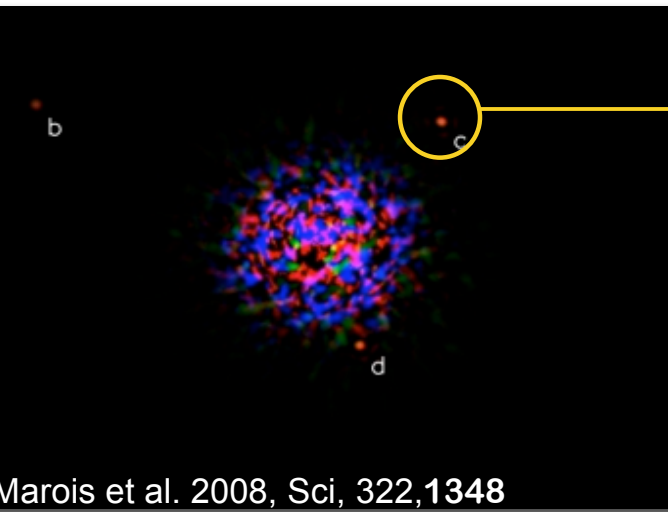


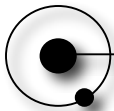
# Actual researches:

## Constraint of evolutionary models of substellar objects



New calibrator : TWA22 AB !

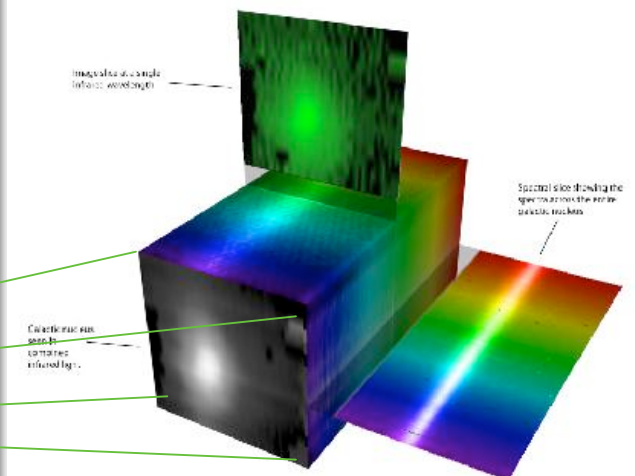
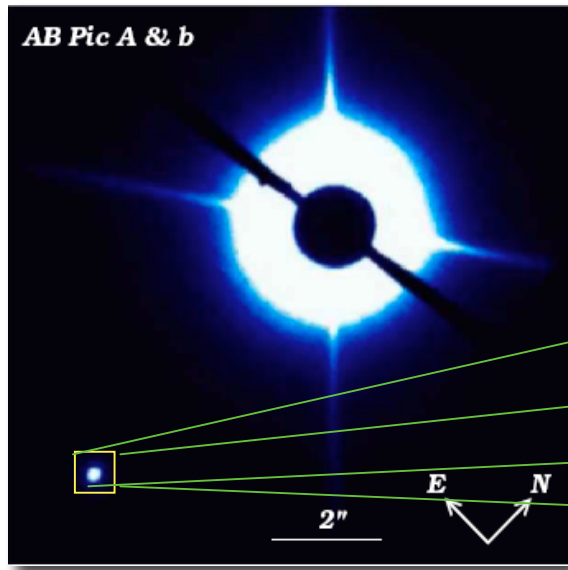
- \*Dynamical total mass =  $220 \pm 20 M_{\text{jup}}$
- \*Resolved NIR spectroscopy of TWA22 A and B with the IFU VLT/SINFONI
- \*Conclusion: Models seems to underestimate the mass of young objects (see Bonnefoy et al. 2009a).



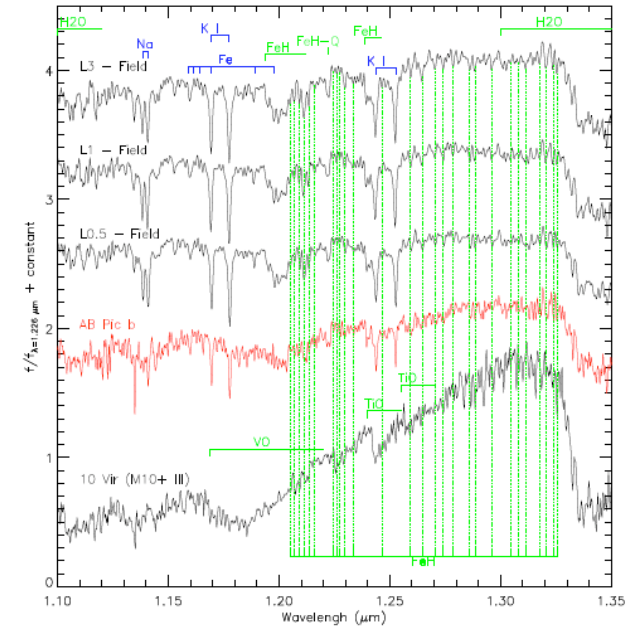
Mickaël Bonnefoy // LAOG (France) // PhD (2<sup>nd</sup> year)  
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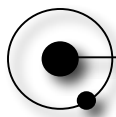
# Study of the atmospheres of very low mass objects (exoplanets/brown dwarfs)



SINFONI (1.1-2.45  $\mu\text{m}$ )



- \*AB Pic b spectrum looks like that of 2M0141 (see Kirkpatrick et al. 2006)
- \* **Atmospheric models fail to reproduce the spectrum** of AB Pic b. So, disk flux contamination ?
- \* Results in **Bonnefoy et al. 2009b**, submitted and in **Bonnefoy et al. 2009c**, in prep.



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