

Summary of day 4

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Instrumental part

- Space always (most often) wins ... but ground-based interferometers already operating. (James Lloyd)
- If you do not mind the cold, go to Dome C!
- SIM on a testbed: everything one needs to solve in order to reach the $4\mu\text{as}$ goal. (Michael Shao)
- Limitations are instrumental systematic error and stellar photo noise.

Extrasolar planet science with SIM

- Debra Fischer would go for a few stars well studied rather than a lot at lower precision.
- Lot of planets to come as $[Fe/H]$ increases.
- Importance of a grid made of K giants.
- SIM will increase the overlap between astrometric and Doppler surveys (thus getting the inclination).

The binary trio

- Why studying binaries, especially combined solutions?
 - Because they give masses, radii and luminosities (Bill Hartkopf and Andy Boden)
 - Because they share the astrometric model with planets (Dimitri Pourbaix)
- Speckle accessible to serious (rich?) amateurs. Suitable for surveys: fast and camera light enough to travel with from site to site.
- Pushing the limits with ground based interferometry.
- Do not push too much!

Just to make sure . . .

Thank you Dawn (and the
LOC) for this great week.