



Stellar analysis system

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Stellar physics (goal)

- Stellar age, mass, radius
- Inclination / rotation
- Differential rotation
- Activity: what to measure ? Short term evolution / spots.
- T_{eff} , gravity, Luminosity, V_{ini}
- Composition ; structure (convective core,...)



Stellar physics (goal)



- Stellar age: 200 Myears
- Mass: 5%
- Radius: 2%
- Inclination: TBC (precise the need!).

- Activity; dynamo

Activity: what to measure ? Short term evolution / spots.

Rotation: a few %

- Differential rotation (in latitude): 10%
- Differential rotation (in depth):
« Difference between surface estimate and splittings ? »



Stellar physics (goal)



- T_{eff} : 50 K
- Gravity: 0.1 dex
- Luminosity: (not a concern)
- V_{ini} : 1 km/s
- Chemical abundances: 0.1 dex
- structure (convective core,...)



Stellar physics (Inputs)



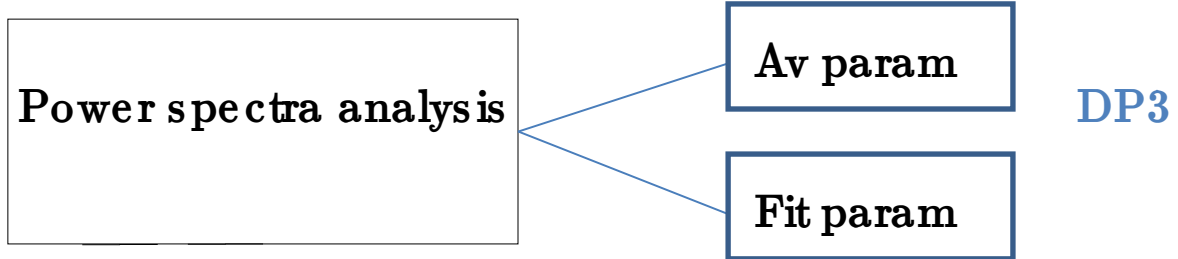
- Light curves
- Colours
- Spectra (resolution ; 45000; [3800-9000])
- Parallaxes
- Interferometric measurements (near-by stars)
- Spectropolarimetry (visible AND IR)



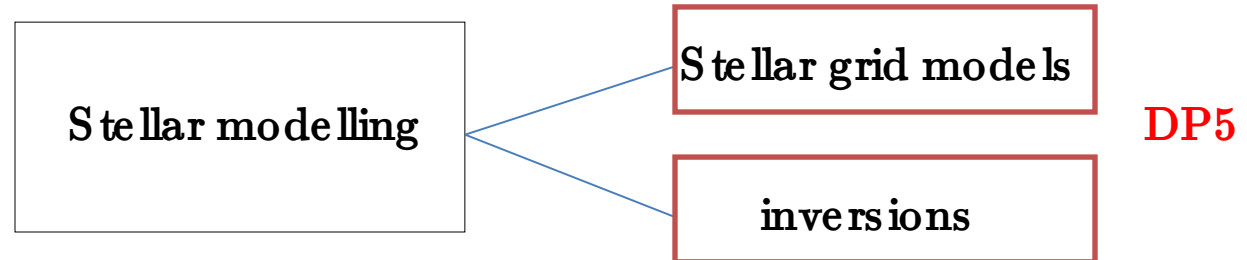
LCs tools



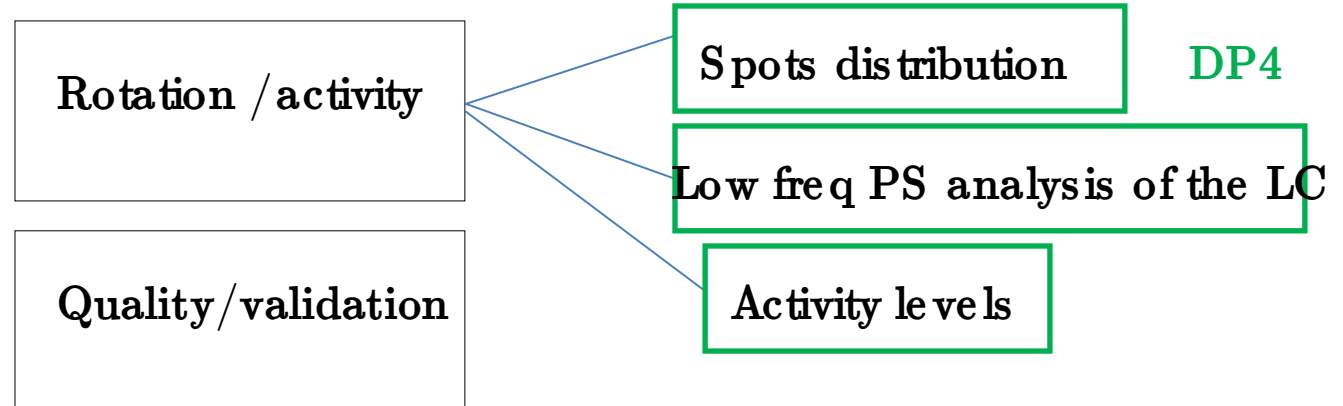
LC
ANC



Input
Physics
ANC



LC ANC
S





tools

