

connecting the dots between heliophysics \rightleftharpoons astrophysics

global

- (exo)planets **o**
- stars and stellar observations **(o m)**
- heliosphere (astrospheres) **(o m)**
- stellar cluster winds **m**
- pulsars **m o**
- supernova remnants **m o**
- protoplanetary disks **m o**
- interstellar medium **o**
- AGNs **o m**
- clusters of galaxies **o (m)**

meso

- turbulences **m o**
- radiation-interaction with matter (e.g., ionisation, recombination,...) **m o**
- cooling heating **o m**
- discontinuities, e.g., shock structures **m o**
- transport parameters (bottom - up) **m**

particle transport

- transport parameters (top - down) **o m**
(wave-particle-interaction)
- complexity of describing the pt (-> kinetic, HD models) **m**

particles

- suprathermal sw **m o**
- neutrals **m o**
- pic-up ions **m o**
- ACRs **m**
- solar-stellar-pulsar energetic particles **m o**
- GCRs from SNRs, ACNs, clusters of galaxies **m o**
- Photons (multi-wavelengths approach) **o m**

