

HARMONI

Simulated High-Redshift Galaxy Gas Kinematics with HSIM for HARMONI on the ELT

Laurence Routledge

in collaboration with Richardson, M., Thatte, N., Tezca, M., Houghton, R. and Pereira-Santaella, M.



Introduction and Simulation

- HARMONI is an upcoming IFS for the ELT, covering optical and near-IR.
- Galaxy extracted from 'NUT' simulation suite, based on 'RAMSES' code.
- H-alpha line strength directly related to SFR.
- Simulated observations with HSIM tool.
- Analysis of resulting cubes, to extract galaxy kinematics.

Results and Conclusions

- Recover intrinsic rotation.
- Observed rotation appears smoothed.
- 1 hour of exposure time sufficient for ELT with SNR of ~ 5 in central regions

