Hydrodynamical simulation for NGC4569

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Résumé

The massive galaxy NGC4569 in the Virgo cluster is one of the best examples of a galaxy undergoing a ram pressure stripping event, as suggested by a large amount of multi-frequency data.

To provide a comparison with a simulated counterpart, I am analysing an ad-hoc hydrodynamical simulation of a galaxy with the same parameters. This simulation is specifically tuned to distinguish various gas phases (ionised, molecular, and cold atomic gas), allowing us to follow the different gas removal phases in the ram-pressure stripping process.

This comparison will allow us to study closely if hydrodynamical simulations are able to account precisely for ram pressure tails and to study how the galaxy components change over time due to this process.

Mots-Clés: hydrodynamical simulation, NGC4569, gas phases

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