

## MEGARA Early-Science results: neutral and ionized galactic winds in the central parts of nearby galaxies.

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### Abstract

Galactic winds are widely recognized as essential components in the evolution of galaxies. In order to study the multi-phase structure of winds, we are analyzing high-quality IFS MEGARA IFU [1] data taken during the Commissioning Period (June 2017). We present the first results obtained from the mapping of the central regions of a small sample of nearby galaxies. On one hand, the neutral gas outflows are traced by the interstellar Na I  $\lambda\lambda$  5890,5896 doublet excess using a low-resolution set-up (5143–6164 Å at R=6K). On the other hand, the ionized gas phase and its connection to nuclear star formation is analyzed thanks to the high-resolution set-up (6445–6837 Å at R=20K). This study will shed light on the role that AGN activity [2] and galactic outflows [3] play on the evolution of galaxies and measure the balance between negative and positive feedback in the center of galaxies. Authors acknowledge financial support by the MINECO project AYA2016-75808-R. C.C.-T. gratefully acknowledges the support of the European Youth Employment Initiative (YEI) by means of the Postdoctoral Fellowship Program. (See poster).

### References

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