Unmasking the history of \textbf{3C293} with LOFAR sub-arcsecond imaging

Pranav Kukreti$^{1,2}$ - 2nd year PhD student

Raffaella Morganti$^2,1$, Timothy Shimwell$^2,3$ and others (Kukreti et al. 2021, submitted)

1. Kapteyn Astronomical Institute, University of Groningen
2. ASTRON, the Netherlands Institute for Radio Astronomy
3. Leiden Observatory, Leiden University
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Introduction

B2 0258+35 - Brienza et al. 2018

NGC 3998 - Sridhar et al. 2020

Centaurus A - McKinley et al. 2018
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- 13 international stations - max baseline 1989 km - 0.27" at 150 MHz.
3C293

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CO (1-0) image from Labiano et al. 2014
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Spatially resolved spectral study required! (for spectral properties with distance from centre)
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![Absorption model fits](image)
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• Inner lobes interacting with surrounding medium, confined by dense ISM - “frustration”?.

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- Leakage from decelerated plasma could form the low surface brightness diffuse emission.
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• ILT allows studying the small scale CSS emission and large scale lobe emission simultaneously! Synergy with APERTIF and WEAVE will be useful to explore the link between their life-cycle and gas properties!