

## VLBI / VLTI exploration of the multiple system ABDorA/C.

J. B. Climent<sup>1</sup>, J. C. Guirado<sup>1,2</sup>, R. Azulay<sup>1</sup>, J. M. Marcaide<sup>1</sup>, and I. Martí-Vidal<sup>3</sup>

<sup>1</sup> Departament d'Astronomia i Astrofísica, Universitat de València, C. Dr. Moliner 50, 46100 Burjassot, València, Spain

<sup>2</sup> Observatori Astronòmic, Universitat de València, Parc Científic, C. Catedrático José Beltrán 2, 46980 Paterna, València, Spain

<sup>3</sup> Onsala Space Observatory, Space Earth and Environment, Chalmers University of Technology, 43992 Onsala, Sweden

### Abstract

We report on radio and infrared interferometric observations of the ABDorA/C mutiple system addressed to study the radiation mechanism of its components, and the possible binarity of the low-mass companion C. Our results indicate 1) the presence of large coronal structures in ABDorA produced likely by magnetically confined plasma; 2) the possible binarity of ABDorC, as concluded by the infrared VLTI visibilities; and 3) the detection for the first time of (compact) radio emission from ABDorC. With only  $0.09 M_{\odot}$ , ABDorC is one of the lowest mass objects detected by VLBI arrays. (See poster).