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

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Abstract

We report on radio and infrared interferometric observations of the ABDorA/C multiple 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⊙, ABDorC is one of the lowest mass objects detected by VLBI arrays. [See poster].