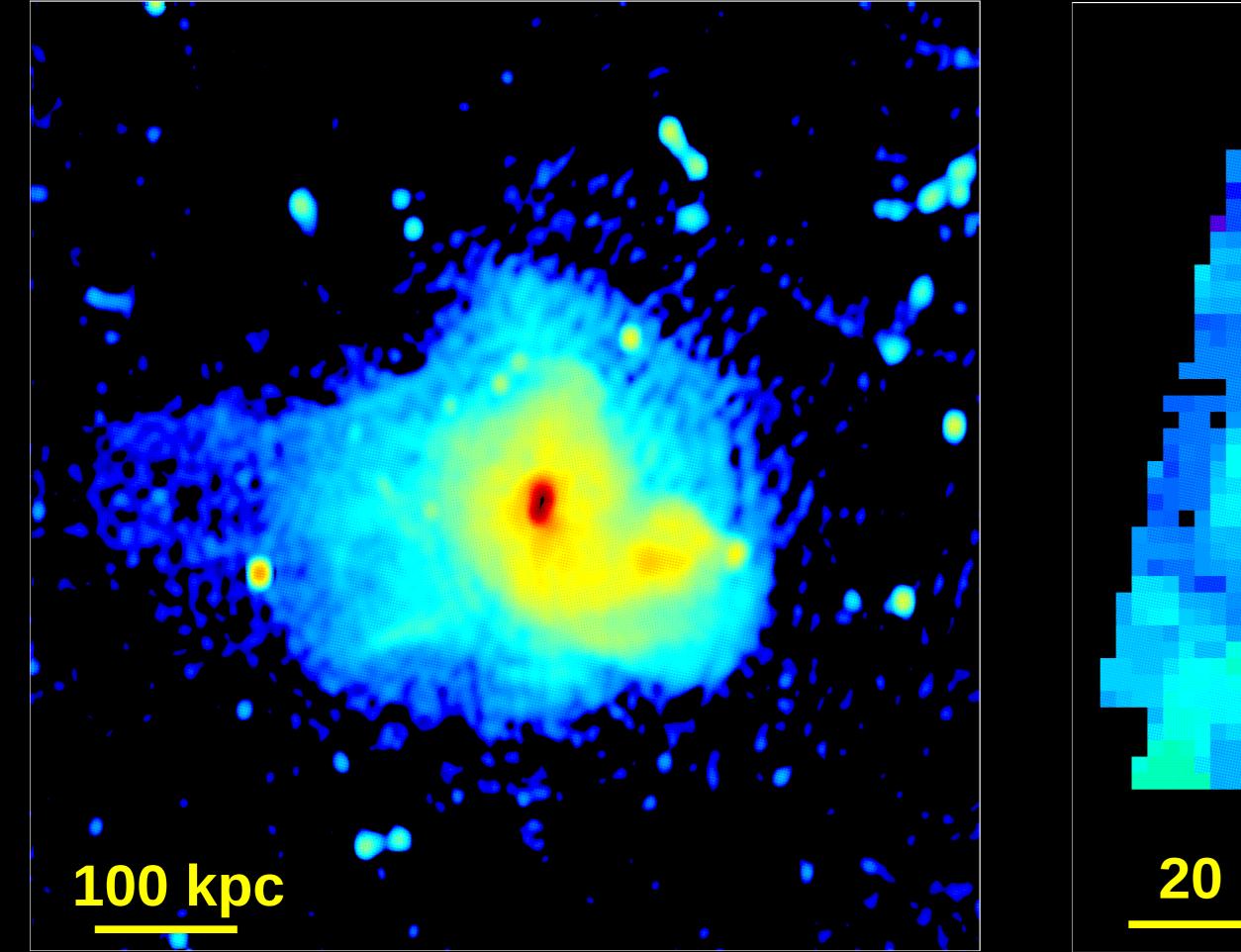
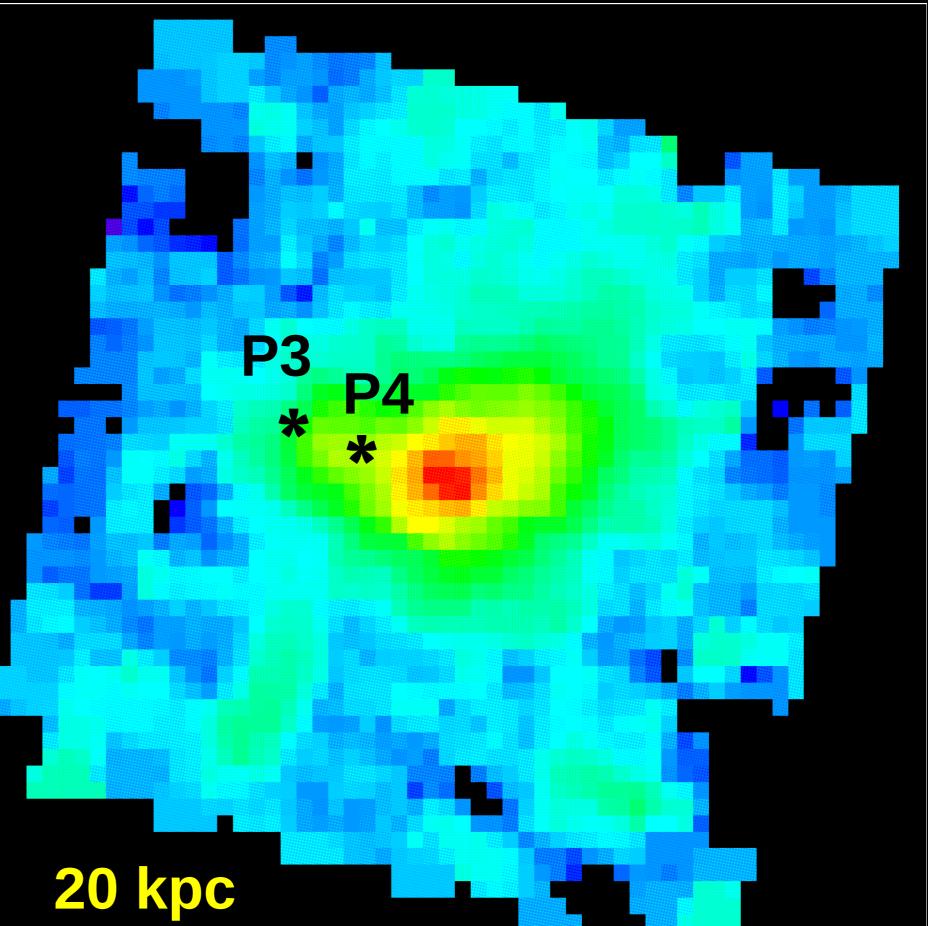
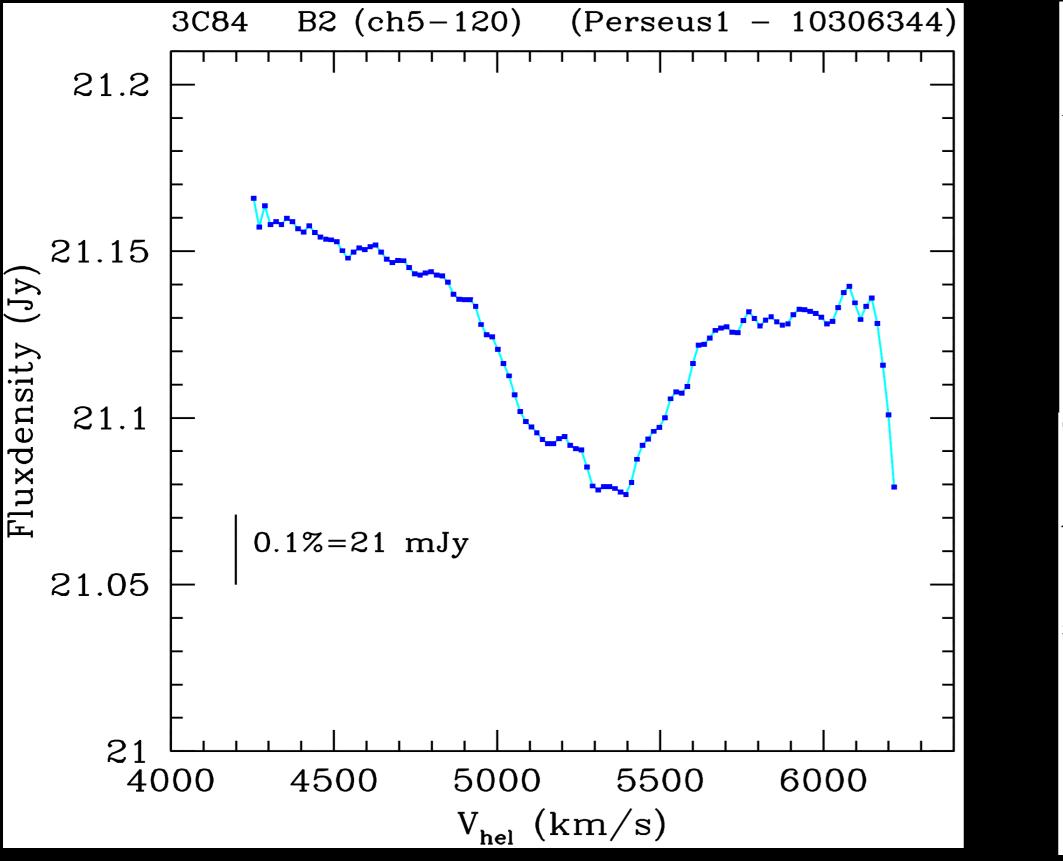
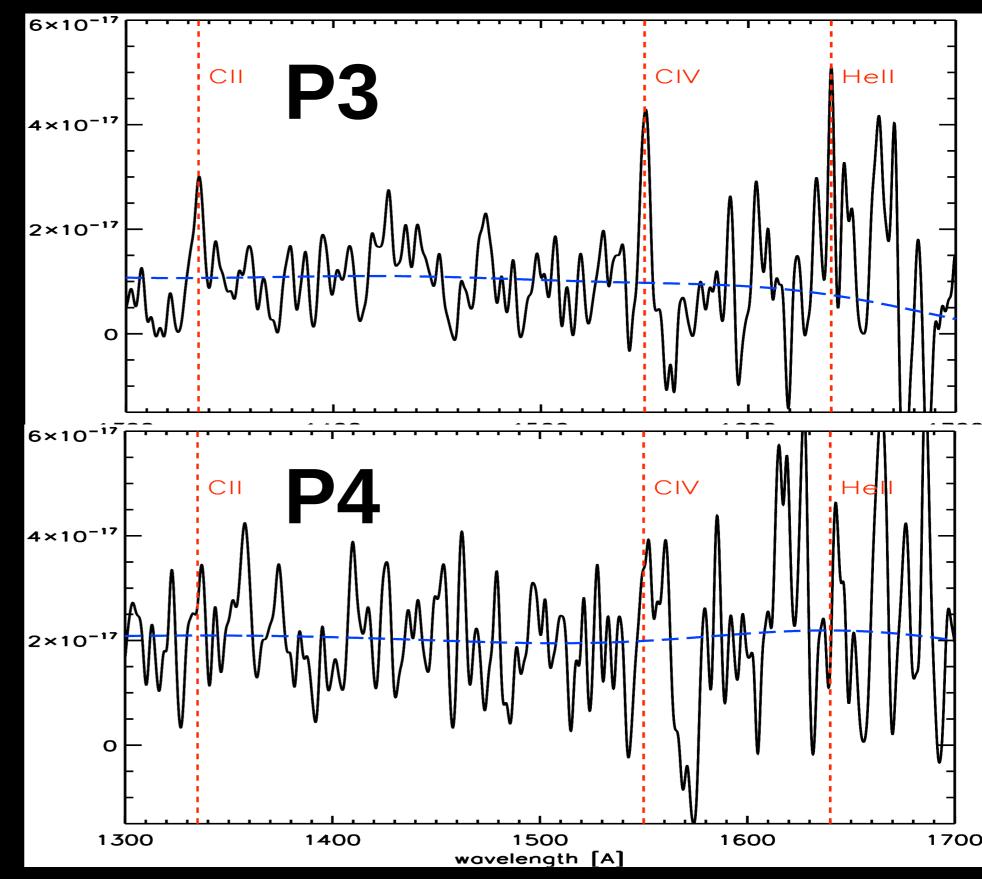
## The multiphase medium in Perseus







(*Top*) 1.4 GHz radio continuum emission surrounding NGC 1275 at the heart of the Perseus cluster (*WSRT*, de Bruyn et al. In prep.).



(*Top*) [CII] 157 micron emission map of NGC 1275 with *Herschel-PACS*. The gas filaments, at 20 kpc from the nucleus, are clearly detected (Mittal, Oonk et al. in prep).

(*Bottom*) Broad HI absorption against the central radio source in NGC 1275. Narrower components indicative of dynamically colder gas have also been detected (*WSRT*, de Bruyn et al. In prep.).

(*Bottom*) First off-nuclear [CIV] 1549Å detection in NGC 1275 with *HST-COS*. This line shows the presence of hot gas (10<sup>5</sup> K) coexisting with cold gas (Oonk et al. In prep.).

AST(RON

Netherlands Institute for Radio Astronomy