



## **Structure of convective rain cells observed by Italian radars**

**N. Rebora** (1), L. Ferraris (1,2), J. von Hardenberg (1), A. Provenzale (1,3)

(1) CIMA, via Cadorna 7, I-17100 Savona, Italy , (2) DIST, Via all'Opera Pia 13, I-16145 Genova, Italy, (3) ISAC-CNR, c.so Fiume 4, I-10133, Torino, Italy (nicola@cima.unige.it)

Rain cells are structures which represent an important component of convective precipitation events both in the tropics and at mid-latitudes. A study of their properties in observed rainfall fields represents a necessary step both towards improved stochastic models of small-scale precipitation and for the verification of deterministic high resolution local-area models. We present results on the analysis of the structure of convective rain cells in intense precipitation events, observed by radar measurements in Italy. In particular, parameters such as the average shape of precipitation cells, the distributions of their radii and of ellipticities are determined and discussed.