Carleson measures, distributions and Toeplitz operators with radial symbols
Antti Perala, University of Helsinki

We compare boundedness conditions for Toeplitz operators on the Bergman spaces of the unit disk. We extend the definition of Toeplitz operator to the case where the symbol is in the distributional Sobolev space $W_{\nu}^{-m,\infty}$. We show that a certain Carleson-type condition for locally integrable radial symbols will imply the membership in $W_{\nu}^{-m,\infty}$. Examples and compactness criteria are also given. This joint work with J. Taskinen and J. Virtanen is a part of the paper to be published in the proceedings of the RAFROT2010 conference.