1163-47-805 **Wolfram Bauer*** (bauer@math.uni-hannover.de), Leibniz Universität Hannover, Institut für Analysis, Welfengarten 1, 30167 Hannover, Germany. *Berger-Coburn theorem, localized operators and the Toeplitz algebra.*

We consider Toeplitz operators on the p-Fock space ($1 \leq p \leq \infty$) over the complex n-space $\mathbb{C}^n$. In the first part of the talk we present an extension of the classical Berger-Coburn theorem on the boundedness of Toeplitz operators via the heat flow to the non-Hilbertian case $p \neq 2$. Even in the classical situation $p = 2$ our proof is a simplification and slightly extends the original statement. In the second part we give a short survey on compactness characterizations via the Berezin transform in the framework of bounded operators on Bergman spaces and the p-Fock space. Based on some new observations combined with a result by J. Xia we then discuss various new characterizations of the Banach algebra generated by Toeplitz operators having bounded measurable symbols. If time permits we will comment on R. Werners *correspondence theory*, which, adapted to the Fock space setting, is a suitable tool in the study of Toeplitz algebras. This talk is based on a recent joint work with R. Fulsche (Hannover). (Received September 13, 2020)