Prof. Joscha Diehl
(TU Berlin, Germany)

"Singular stochastic PDEs on Lie groups"

Abstract: We study singular stochastic PDEs - equations that have so irregular forcing terms that they are formally ill-posed - on compact Lie groups. One example is the (continuous) parabolic anderson model. Our main tool is an adaptation of the theory of paracontrolled distributions (Gubinelli/Imkeller/Perkowski) using representation theory for (compact) groups. This is work in progress with Antoine Dahlqvist (TU Berlin).