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**Hadi Salmasian\*** (hsalmasi@uottawa.ca). *Harmonic analysis on finite and infinite dimensional Lie supergroups.*

We will present recent results on unitary representations of Lie supergroups. We show that the categories of smooth and analytic unitary representations of Banach-Lie supergroups are well-behaved under a natural restriction functor. This generalizes the existing results for finite dimensional Lie groups. We will also explain how the orbit method and the GNS construction can be adapted to the super context. Time permitting, We will outline the application of our results to generalize the Kirillov-Olshanski theory of unitary representations of infinite dimensional classical supergroups. Part of this talk is based on joint works with Karl-Hermann Neeb and Stephane Merigon. (Received June 27, 2011)