Classes of pseudo-differential operators on compact Lie groups and global hypoellipticity

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Abstract:

In this talk we will discuss symbolic characterisations of pseudo-differential operators on compact Lie groups, applications to pseudo-differential calculus and questions of ellipticity and global hypoellipticity. Examples of hypoelliptic operators will be given in combination with subelliptic estimates and characterisations of pseudo-differential parametrices.

This is joint work with Michael Ruzhansky (London) and Ville Turunen (Helsinki).