

Contents

Preface	vii
List of speakers	ix
Lie groupoids for sub-elliptic operators IVAN BESCHASTNYI	1
Normal forms for the sub-Riemannian exponential map of \mathbb{G}_α , $SU(2)$, and $SL(2)$ SAMUËL BORZA	23
Holonomy of H-type foliations FABRICE BAUDOIN and SYLVIE VEGA-MOLINO	49
Spectral gap bounds on H-type groups MARCO CARFAGNINI and MARIA GORDINA	59
Embedding the Grushin cylinder in \mathbf{R}^3 and Schroedinger evolution IVAN BESCHASTNYI, UGO BOSCAIN, DANIELE CANNARSA, and EUGENIO POZZOLI	73
Polar coordinates in Carnot groups II JEREMY T. TYSON	89
Convergence to equilibrium for hypoelliptic non-symmetric Ornstein-Uhlenbeck-type operators FABRICE BAUDOIN, MICHEL BONNEFONT, and LI CHEN	103
Lagrangian stability for a system of non-local continuity equations under Osgood condition MARCO INVERSI and GIORGIO STEFANI	123