

Effective issues in Non-Smooth Systems

Alain JACQUEMARD ¹

¹ IMB - Université Bourgogne Franche-Comté

The scientific modeling of certain physical phenomena naturally requires the introduction of abrupt variations of the parameters values. Many examples of non-smooth dynamical systems arise this way. This field, which has a theoretical frame of its own, keeps developing and growing, both because of its applications and because of its intrinsic mathematical interest. A challenge is to study new structural questions arising in this setting by means of algorithmic methods and to express their invariants in terms of explicit and optimal expressions.