Ambit processes; with applications to turbulence and tumour growth

Ole E. Barndorff-Nielsen and Jürgen Schmiegel Thiele Centre for Applied Mathematics in Natural Science, Aarhus University, $DK\text{--}8000 \ Aarhus, \ Denmark$

Abstract

The concept of ambit processes is outlined. Such stochastic processes are of interest in spatio-temporal modelling, and they play a central role in recent studies of velocity fields in turbulence and of the growth of cancer tumours. These studies are reviewed, and some open problems are outlined.