1099-46-372Marius Junge* (mjunge@illinois.edu), Department of Mathematics, Urbana, IL 61801, and
Mathilde Perrin. Noncommutative stochastic analysis. Preliminary report.

We will report on noncommutative Hardy spaces for continuous filtrations in von Neumann algebras. This theory developed with Mathilde Perrin is the stepping stone to define stochastic integrals for semi-martingales. We will discuss some technical issues such as 'what means continuous path?', 'is there a way to formulate cadlag?'. We will also indicate applications and problems for conditionally free dilations. (Received February 11, 2014)