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# Ergodic BSDEs with unbounded and multiplicative underlying diffusion

In this talk, we deal with Ergodic Backward Stochastic Differential Equations for which the underlying SDE (in finite dimension) has a sublinear diffusion. Hu, Madec and Richou have recently studied those equations, but with an additive noise (and in infinite dimension). First, we show existence and uniqueness of the solution under assumptions similar to their work (especially weak dissipativity of the drift for the underlying SDE). Then, we obtain the large time behaviour of viscosity solutions of HJB equations.

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