Bismut Formulae and Applications for Functional SPDEs

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Abstract: By using Malliavin calculus, explicit derivative formulae are established for a class of semi-linear functional stochastic partial differential equations with additive or mul- tiplicative noise. As applications, gradient estimates and Harnack inequalities are derived for the semigroup of the associated segment process.

This is a joint work with Feng-Yu Wang and Chenggui Yuan.