



UC3M-ICMAT Seminar – 2014/2015

## Applied Probability and Statistics

### Reaction Diffusion processes (Doi-Peliti and field theory)

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Tuesday, February 24, 2015  
14h00, ICMAT, Aula Gris I

Starting from a Master Equation, a large class of reaction diffusion processes or generally processes involving interacting agents can elegantly be turned into a field theory using the language of second quantisation, as pioneered by Doi and Peliti. Using the language of diagrams and field theory allows the efficient calculation of a range of interesting observables, not confined to the characterisation of a possible critical point. I will give a brief introduction to the method, its benefits and some of its challenges.

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