

**Cluster Point Processes via Configuration Space Analysis:  
integration by parts, stochastic dynamics and Poincaré inequalities**

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Time **Tuesday, April 5, 2011 at 17:00**

Place **Campus Kirchberg, room B02**

The distribution  $\mu_{\text{cl}}$  of a cluster point process in a Riemannian manifold  $X$ , with i.i.d. clusters attached to points of a random (e.g. Poisson or Gibbs) configuration in  $X$ , is studied via the projection of an auxiliary measure on a marked configuration space of  $X$ . We prove an integration by parts formula for  $\mu_{\text{cl}}$  and discuss properties of the corresponding Laplacian.