

**On an application of the Margulis-Russo type formula  
for Poisson processes in stochastic geometry**

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Place **Campus Kirchberg, room A16**

The expectation of a (fixed) function of a Poisson process is a functional of its intensity measure. The Margulis-Russo type formula gives the derivative with respect to non-linear transformations of the intensity measure depending on some parameter. We apply this formula to give a short proof of a classical (and fundamental) result of stochastic geometry on geometric densities of the Boolean model.