

## Marking the Brownian web and applications

**Abstract:** In this talk I will discuss recent results (and some ongoing work) obtained in collaboration with C.M. Newman and E. Schertzer. I will start with a brief introduction to the discrete web of coalescing simple random walks and its continuum diffusive limit, the Brownian web (BW). After indicating how the continuum limit of the noisy voter model (Glauber dynamics of nonzero temperature stochastic Ising model) is obtained using the marking of  $(0, 2)$  (or bulk nucleation) points of the BW, the remainder of the talk will focus on  $(1, 2)$  points of the BW which correspond to the boundary nucleation points of the stochastic Potts model. I will then describe the marking procedure for the  $(1, 2)$  points and indicate how it can be used to construct the Brownian net and then I will describe how these marking (along with the markings of  $(0, 2)$  points) can be used to obtain the continuum limit of stochastic Potts model. If time permits I will discuss the marking construction of dynamical Brownian web.