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Littelmann path model for geometric crystals and Archimedean Whittaker functions as geometric characters.

I will try to describe a path model for geometric crystals in the sense of Berenstein and Kazhdan, for complex semi-simple Lie groups. The theory of total positivity will play a particularly important role. By taking a random path which is a Brownian motion, geometric crystals are endowed with canonical measures. This will allow me to explain why Whittaker functions are to geometric crystals, what characters are to classical Kashiwara crystals.