

1110-05-273 **Mikhail Mazin*** (mmazin@math.ksu.edu), Mathematics Department, 138 Cardwell Hall,
Manhattan, KS 66506-2602, and **Eugene Gorsky**. *Two formulas for the div statistic.*

There are two different formulas for the div statistic on rational Dyck paths. The first formula was formulated by Nick Loehr and Greg Warrington and is motivated by geometry of the Hilbert scheme of points on the complex plane. The second formula was formulated by Eugene Gorsky and Mikhail Mazin and is motivated by geometry of affine Springer fibers and Jacobi factors. The equivalence of these formulas is non-trivial from both geometric and combinatorial points of view.

In this talk, I will explain the geometric origins of both formulas and sketch a proof of their equivalence. (Received February 23, 2015)