1070-05-296 **Karola Meszaros*** (karola@math.mit.edu) and **Alexander Postnikov**. *Branched polymers and hyperplane arrangements.*

Branched polymers are certain configurations of nonoverlapping disks in the plane. In 2003 Brydges and Imbrie discovered some remarkable formulas for the volumes of configuration spaces of branched polymers. These formulas mysteriously involve combinatorial numbers like $(n-1)!$. We introduce branched polymers arising from any central hyperplane arrangement $\mathcal{A}$ and express the volume of the resulting configuration space through the characteristic polynomial of $\mathcal{A}$. (Received February 15, 2011)