

1036-51-176

Reza Chamanara* (RChamanara@brooklyn.cuny.edu), Brooklyn College, Department of Mathematics, 2900 Bedford Avenue, Brooklyn, NY 11210-2889. *Piecewise linear coordinates for spaces of finite disk patterns.*

Andreev's theorem can be regarded as a parameterization theorem for certain spaces of finite disk patterns on the sphere so that all the conditions defining the parameterization are linear. The parameterization is defined by weighted triangulations of the sphere so that the vertices of the triangulation correspond with the disks and the weight on an edge connecting two vertices prescribe the angle of intersection between the disks corresponding to those vertices. Several extensions of Andreev's theorem based on the parameters defined by angle of intersection between pairs of disks exist. I will describe a Mbius invariant piecewise linear parameterization of the space of disk patterns with a fixed number of "pair-wise disjoint" disks on the sphere. If time permits, I will also explain how this parameterization can be extended to larger spaces of disk patterns. (Received January 22, 2008)