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Asilata Bapat* (asilata@uga.edu) and **Robin Walters** (r.walters@neu.edu). *Bernstein–Sato polynomials and monodromy conjectures for Weyl arrangements.*

To a singularity of an algebraic hypersurface, one can associate a subtle invariant called the Bernstein–Sato polynomial or the b -function. The roots of the b -function recover several other known singularity invariants, so it is useful to understand the b -functions of interesting hypersurfaces.

We will consider the case of a Weyl hyperplane arrangement, which is the arrangement of roots in the root system of a semi-simple Lie algebra. For these hypersurfaces, we establish a link (conjectured by Denef–Loeser in the monodromy conjectures) between the b -function and another known invariant, namely the topological zeta function. (Received September 19, 2016)