1157-14-251 **Daniel Lloyd Bath*** (dbath@purdue.edu). *Bernstein–Sato Varieties and the Topological Multivariable Strong Monodromy Conjecture.*

We consider a multivariate generalization of the Bernstein–Sato polynomial due to Budur as well as the associated $D_X[s_1, \ldots, s_r]$-module $D_X[s_1, \ldots, s_r]f_1^{s_1} \cdots f_r^{s_r}$. Generalizing techniques of Walther, we show that for a large class of divisors $f = f_1 \cdots f_r$, the annihilator of $f_1^{s_1} \cdots f_r^{s_r}$ is generated by the simplest possible elements. As an application, we verify Budur's Topological Multivariable Strong Monodromy Conjecture for tame hyperplane arrangements. Time permitting, we show that for tame and free arrangements, the generalized Bernstein–Sato variety contains several combinatorially determined hyperplanes. (Received January 30, 2020)