

1154-54-2488

Mustafa Hajj, Jesse S F Levitt* (jslevitt@usc.edu) and **Radmila Sazdanovic**. *Learning from Filtrations on the Space of Knots*.

The authors discuss how to ‘best’ analyze knot invariant statistics on the space of knots. Consideration is given to filtrations based on any invariant that produces a well-ordered set. A way to measure which is the logical way to arrange knot tabulations is proposed based on the results. A variety of results and conjectures from statistics and data science that remain consistent under the ‘best’ filtration will be presented. (Received September 17, 2019)