1163-54-1543   **Candice R Price*** (`cprice@smith.edu`), **Catherine Chalikian**, **Elaona Lemoto** and **Zoe Dillion-Davidson**. *Classes of 2-dimensional projections of knots.* Preliminary report.

A core question in knot theory is: How do we identify whether two knots are equivalent under a specific set of operations? Knot theory deals not only with the curious variations in the underlying topological structure (e.g. strands, loops, choice of operations) of knots but also with invariants (e.g. Alexander, Jones, link homologies). Knot theory has been used in various fields of mathematics and has become an essential resource for understanding the topology and the geometry of DNA. In this presentation, we will apply combinatorial tools to interpret 2-dimensional projections of knots and share methods for categorizing these projections. (Received September 15, 2020)