Schinzel-type bounds for the Mahler measure on lemniscates continued

Speaker: Ryan Looney, OSU
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Abstract: For the classical Mahler measure, there exists a sharp lower bound for the measure of totally real integer polynomials which was originally proven by a result of Schinzel. In our previous talk, we proved Schinzel’s result through a well-known proof by Höhn and Skoruppa. We discuss an extension of this proof to a generalization of the Mahler measure to lemniscates. In the classical case, it is known that the Schinzel bound for totally real polynomials is sharp, and we describe when an analogous bound is sharp for our generalization. This is a joint work with Igor Pritsker.