Symmetric Determinantal Singularities and Whitney Equisingularity

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Abstract: In this talk, we are going to introduce the study of the Whitney Equisingularity of families of Symmetric Determinantal Singularities. We start by defining the variety, then presenting its main properties and results. Moving forward, we prove a formula to calculate the multiplicity of the polar curve of the normal module of a 1-parameter stabilization of the symmetric determinantal variety. Finally, we will show the connection between this multiplicity and the Singular Theory.