

GRADUATE SEMINAR

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Higher Rank Numerical Range

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3:30 PM

Math Lounge, CW (307.20)

Abstract: In this talk, I will present higher rank numerical range. First, I will introduce some equivalent definitions to the higher-rank numerical range, and discuss some of its properties. During the talk, we will see that the higher rank numerical range generalizes the classical numerical range.

Second, I will present some geometrical properties such as the convexity of the higher rank numerical range. In the Hermitian case the higher-rank numerical range is a closed interval, while in the normal case it is a polygon. However, in general, the higher-rank numerical range is always convex.

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