Speaker: Ilya Spitkovsky (College of William and Mary)

Title: On some properties of the field of values generating function.

Abstract: The field of values (also known as the numerical range) of a given matrix $A$ is by definition the range of the function $f: x \mapsto (Ax, x)$ considered on the unit sphere. We will discuss the properties of its inverse, in particular, the extent to which the latter is multivalued, and the sense in which it may (or may not) be continuous.

The results are mostly from the joint work with B. Lins and T. Leake.