Mathematics, Statistics, and Computer Science **@ UIC**

Logic Seminar

Defining R *and* G(R)

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Abstract: In joint work with Segal we use the fact that for Chevalley groups G(R) of rank at least 2 over a ring R the root subgroups are (nearly always) the double centralizer of a corresponding root element to show under mild restrictions on the ring R that R and G(R) are bi-interpretable. (This holds in particular for any field k.) For such groups it then follows that the group G(R) is finitely axiomatizable in the appropriate class of groups provided R is finitely axiomatizable in the corresponding class of rings.

Tuesday, March 2 at 11:00 AM in Zoom