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The African bush or savannah elephant, *Loxodonta africana*, is a vulnerable species whose conservation requires a deeper understanding of its social behavior and structure. With this goal in mind, we are developing a suite of game-theoretic and dynamic models to explore the effects of states of musth in males and oestrus in females on mutual mate choice and contest behavior among males. This talk will describe the phenomenon of musth and other aspects of elephant social dynamics, the models we are developing to address the issues, and the progress we have made to date.

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