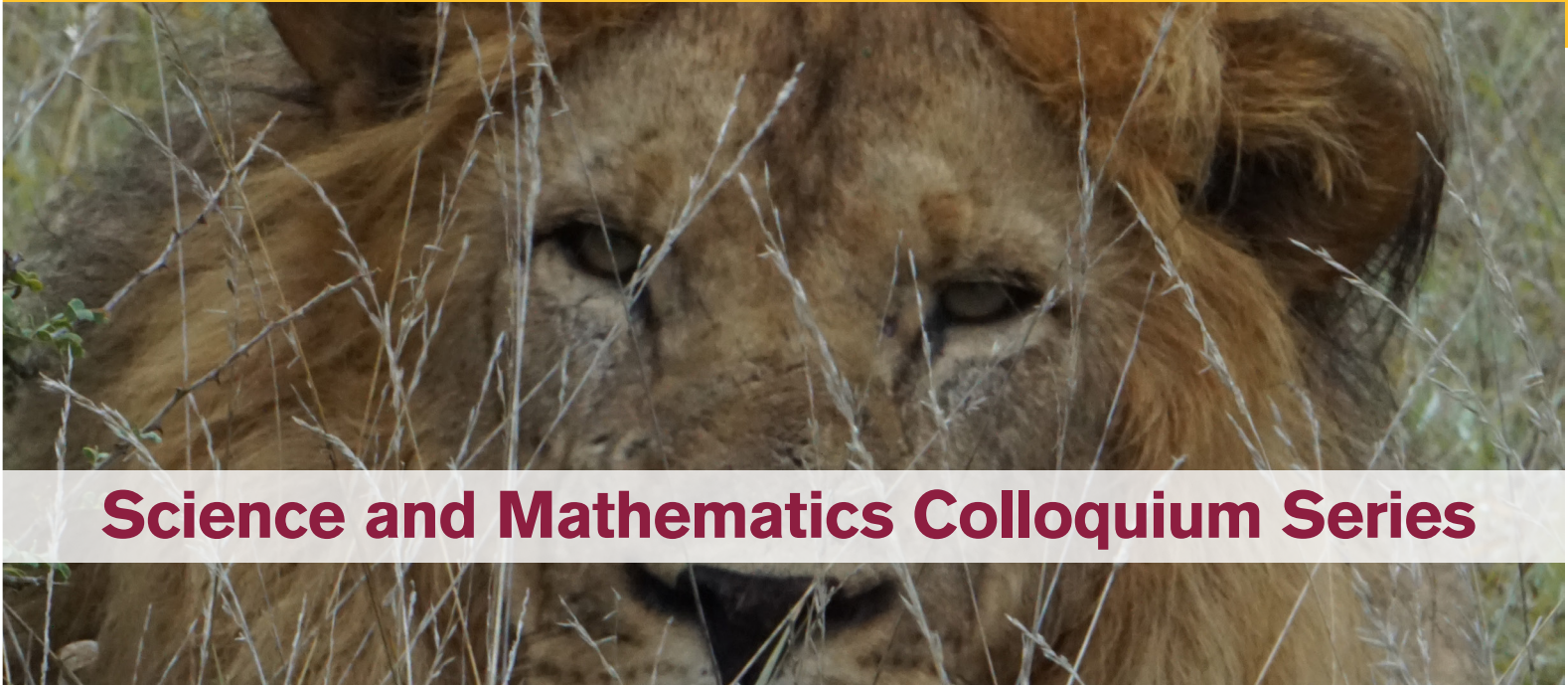


Integrating movement modeling, landscape genetics to predict population connectivity



Science and Mathematics Colloquium Series

Presentation by Sam Cushman
Director, Center for Landscape Science
US Forest Service
Rocky Mountain Research Station, Flagstaff

Wednesday, Feb. 14, 2018
3 – 4 p.m.

Student Union, Cooley Ballroom B
ASU Polytechnic campus

Conservation planning increasingly depends on spatial models of population connectivity to guide management decisions. However, it is challenging to understand how landscapes affect organism movement, and there has been considerable uncertainty in how well connectivity modeling approaches reflect meaningful biological processes.

Combining movement modeling from GPS telemetry with landscape genetic analyses is a powerful approach to obtain reliable information about connectivity. This talk presents several examples of research on modeling connectivity with movement and genetic data for American black bear, African lion, Indian elephant and some other species.

Faculty and practitioners discuss their current research and field projects in the Science and Mathematics Colloquium Series, held throughout the academic year at ASU's Polytechnic campus. All seminars are free and open to the public.

Sam Cushman has worked for the US Forest Service for 15 years on a wide range of topics, including effects of changing climate on disturbance regimes and landscape dynamics, multi-scale species distribution modeling, landscape genetics, and population connectivity modeling.

He earned his doctorate at the University of Massachusetts and a master of science at Western Washington University.

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