

This is to certify that

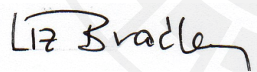
JAMES POLLACK

has successfully completed the Santa Fe Institute's Massive Open Online Course

**Nonlinear Dynamics: Mathematical and
Computational Approaches (spring 2021)**

[.complexityexplorer.org](https://complexityexplorer.org)

May 10, 2021



Liz Bradley, Lead Instructor



David Krakauer, Santa Fe Institute President