

This is to certify that

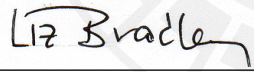
JO-ANNE

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

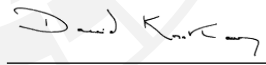
Nonlinear Dynamics: Mathematical and
Computational Approaches (spring 2021)

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

April 14, 2021



Liz Bradley, Lead Instructor



David Krakauer, Santa Fe Institute President