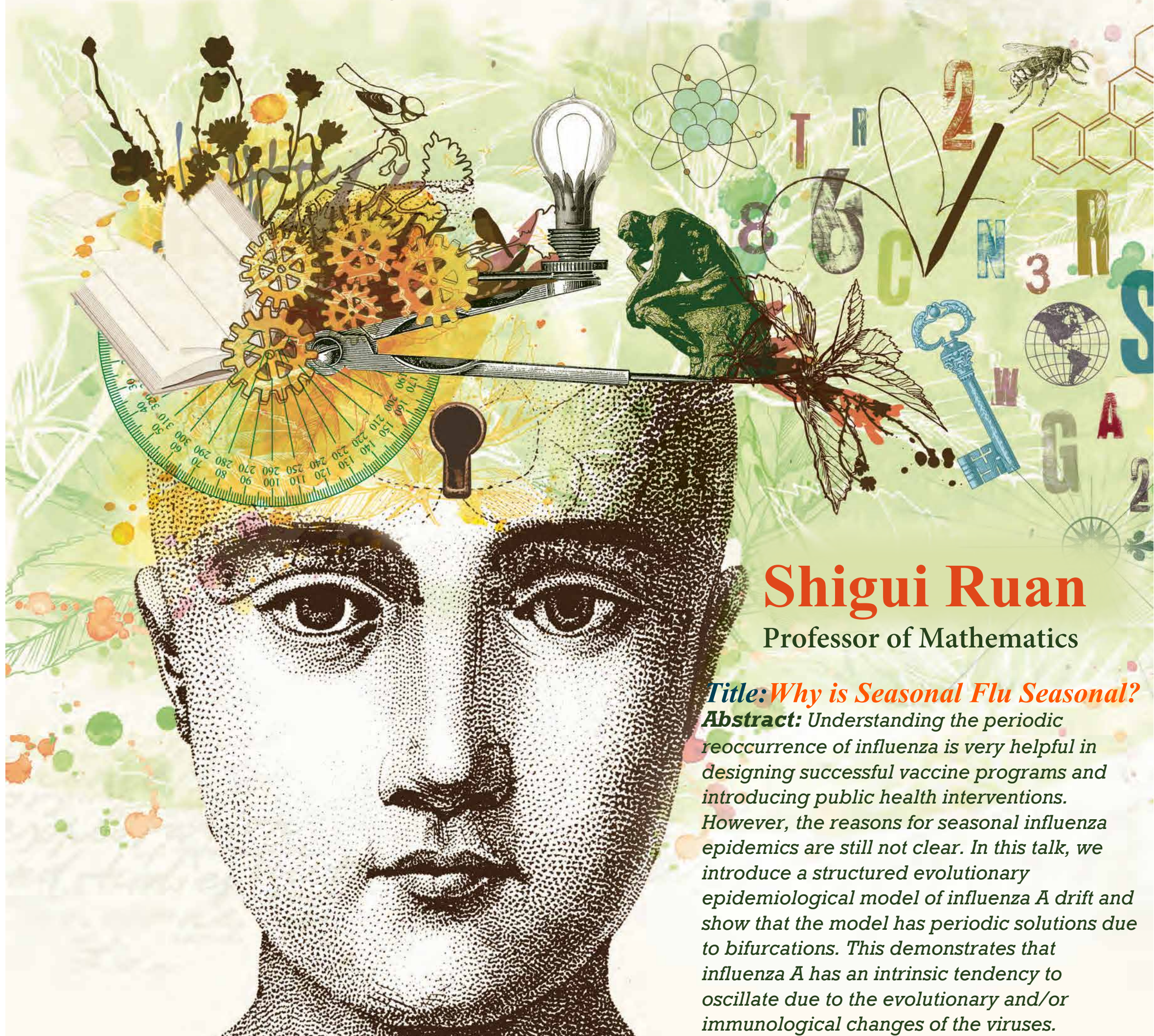


# Cooper Fellow

## LECTURE SERIES

Thursday, February 24, 2022 | 3:30 P.M. via Zoom

<https://miami.zoom.us/j/98838307367?pwd=TW1kVTFRSFJ4VW9URFpkQU9xdkF4Zz09>



## Shigui Ruan

Professor of Mathematics

**Title:** *Why is Seasonal Flu Seasonal?*

**Abstract:** *Understanding the periodic reoccurrence of influenza is very helpful in designing successful vaccine programs and introducing public health interventions. However, the reasons for seasonal influenza epidemics are still not clear. In this talk, we introduce a structured evolutionary epidemiological model of influenza A drift and show that the model has periodic solutions due to bifurcations. This demonstrates that influenza A has an intrinsic tendency to oscillate due to the evolutionary and/or immunological changes of the viruses.*

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Cooper Fellows Lectures are free and open to the public.

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