

# School of Earth and Environmental Sciences Spring 2025 Colloquium Series

Wednesday, March 12, 2025

Zoom ID: 843 0287 5858

12:15 PM -1:30 PM

Passcode: 672323

Science Building C-207

## Pedro Val and Pedro Oliveira

LEGACi Lab, School of Earth and Environmental Sciences

### Dating the Incision of the Lower Amazon River

The Amazon River stands out as the largest river system in the world, crossing Northern South America from the Andes to the Atlantic Ocean. The drainage system had a different configuration in the past and the age it changed to its modern configuration is a large debate.



In this **2-part talk**, we will share some results from ongoing research by the **LEGACi Lab**. In short, we observe signals of landscape change in basins along the northern boundary of the Lower Amazon River that are potentially related to the incision of the main river and linked to this continent-wide change in basin configuration. We aim to calculate the period of incision coupling landscape numerical modeling and Machine Learning with cosmogenic nuclide data, derived from riverbed and buried sediment samples. The results may be key to constrain when the Amazon River obtained its current shape.

