

AGCO Seminar

Speaker: Paul Golz, Cornell U., USA.

Title: Generative Social Choice

Abstract:

The mathematical study of voting, social choice theory, has traditionally only been applicable to choices among a few predetermined alternatives, but not to open-ended decisions such as collectively selecting a textual statement. We introduce generative social choice, a design methodology for open-ended democratic processes that combines the rigor of social choice theory with the capability of large language models to generate text and extrapolate preferences. Our framework divides the design of AI-augmented democratic processes into two components: first, proving that the process satisfies representation guarantees when given access to oracle queries; second, empirically validating that these queries can be approximately implemented using a large language model. We apply this framework to the problem of summarizing free-form opinions into a proportionally representative slate of opinion statements; specifically, we develop a democratic process with representation guarantees and use this process to portray the opinions of participants in a survey about abortion policy. In a trial with 100 representative US residents, we find that 84 out of 100 participants feel "excellently" or "exceptionally" represented by the slate of five statements we extracted.

When: April 2, 3:00 pm - 3:30 pm .

Where: Sala de Seminario John Von Neumann, 7th floor, CMM, Av. Beauchef 851, torre norte.

