**Title: Macro factors driving low-carbon mobility choices across Europe**

**Schedule: October 27 2021, 16:00-17:00 CEST via Teams**

**Short Abstract**

The EU aims at becoming climate-neutral by 2050. The mobility sector will play an important role in reaching this ambitious goal, as it contributes a current share of 25% in overall GHG emissions. Extensive research has been done to understand the drivers of bicycle commuting over carbon intensive transport options, however, most studies do not separate occasional and regular bicyclist, consider the seasonality of commuting, or consider Southern and Northern European countries. This paper uses results from the multinational ECHOES survey of 31 European countries combined with objective geospatial spatial variables (N = 14,941) in a bivariate probit model to estimate seasonal bicycle commuting with demographic, socio-cultural, and geospatial variables. The results indicate that the factors of bicycle commuting change with respect to winter and summer seasons, weather and land use variables are less important than hypothesised, and that geospatial variables can add invaluable information to analysis with spatial heterogeneous samples.

**Presenter**

Ryan O’Reilly is a research associate at the Energieinstitut an der Johannes Kepler Universität Linz. He applies his knowledge of econometric methods, behavioral economics, and geospatial analysis to national and multi-national projects that support the transition to a low carbon energy future. He received a master’s in Agriculture and Applied Economics and certification in Geospatial Information Technology from Virginia Tech, USA, where he researched topics in international development, behavioral economics, remote sensing, and environmental risk assessment.