

## Seminario

Venerdì 16 Giugno, ore 11.00

Aula 5 – Palazzo delle Scienze

# Measuring the Long-Term Impact of Environmental Externalities

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**Abstract** - We exploit a unique dataset of the Danish population observed over more than four decades to measure the long-term health effects of toxic pollution. Making use of incinerators' openings and closings, we explore the interactions among cumulative exposure, intensity, and latency as determinants of lung cancer incidence. On average, the impact of an incinerator becomes detectable 25-30 years after the opening and persists for 10-15 years after the closing. An average amount of cumulative exposure increases the risk of lung cancer by 8%. At low levels of intensity, cumulative exposure impacts lung cancer with a decade-long latency (up to 15 years). At high levels, latency is much shorter (less than 5 years). Not accounting for latency leads to underestimate the health effects of cumulative exposure to incinerators by 90 to 100%, depending on intensity.