COMPUTATIONAL RESEARCH in BOSTON and BEYOND SEMINAR

Observational network design for quantifying urban CO2 emissions

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ABSTRACT:

The majority of anthropogenic CO2 emissions are attributable to urban areas. While the emissions from urban electricity generation often occur in locations remote from consumption, many of the other emissions occur within the city limits. Evaluating the effectiveness of strategies for controlling these emissions depends on our ability to observe urban CO2 emissions and attribute them to specific activities. Cost effective strategies for doing so have yet to be described. Here we characterize the ability of a prototype measurement network in California's Bay Area, in combination with an inverse model, to improve our understanding of urban emissions. Using our inversion framework, we quantify the trade-offs between precision and observational network density for estimating urban CO2 emissions.

FRIDAY, OCTOBER 7, 2016
1:00 PM – 2:00 PM
Building 32, Room 141
(STATA)

Pizza and beverages will be provided.

http://math.mit.edu/crib/

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