

**February 14, 2025**

**4:10 – 5:00 PM**

**Roberts Hall Room 101**

**New insights into CO<sub>2</sub> Radiative Forcing**

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Abstract:

The radiative forcing from anthropogenic carbon dioxide is a central quantity in climate science and has been studied for decades, with detailed benchmark models simulating it in idealized cases with great accuracy. At the same time, coarse-resolution global climate models (GCMs) differ in their estimates of global CO<sub>2</sub> forcing, and questions linger regarding its spatial variations as well as its logarithmic scaling with CO<sub>2</sub> concentration. In this talk we present a recently developed analytical model for CO<sub>2</sub> forcing which answers these questions and also illuminates a previously unidentified, major source of spread in GCM estimates of CO<sub>2</sub> forcing.

Host: John Sample

*\* Refreshments served in the Barnard Hall second floor atrium at 3:45 PM \**