

COLORADO

CAFÉ SCIENTIFIQUE

TUESDAY 12 JUNE 2007

at the Wynkoop Brewing Company

<http://www.wynkoop.com/>

Corner of 18th and Wynkoop in LoDo, Denver

About a block from Light Rail. Thirteen minutes by foot from Auraria.

The Arctic's Shrinking Sea-Ice Cover

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Linear trends in arctic sea-ice extent over the period 1979 to 2006 are *negative in every month*. This ice loss is best viewed as a combination of strong natural variability in the coupled ice-ocean-atmosphere system and a growing radiative forcing associated with rising concentrations of atmospheric greenhouse gases, the latter supported by evidence of qualitative consistency between observed trends and those simulated by climate models over the same period. This transition to a new arctic state may be rapid once the ice thins to a more vulnerable state. Loss of the sea-ice cover will have numerous impacts. A sharply warmer Arctic in autumn and winter is expected as a result of larger heat fluxes from the ocean to the atmosphere. This is the primary fingerprint of arctic amplification of greenhouse warming. As ice retreats from the shore, winds have a longer fetch over open water, resulting in more wave action. This effect is already resulting in coastal erosion in Alaska and Siberia. Ice loss is contributing to regional declines in polar bear health and abundance.

EVERYONE IS WELCOME. The discussion starts at 6:30 in the Mercantile Room (no food service there). Come before 6 PM to leave yourself time to get something to eat, or stay and eat afterwards. We end around 8 PM.

There's no charge. The Wynkoop is generously providing the facility; we buy our own drinks. It is first come, first seated, and **seating is limited** so that everyone can take part in the discussion.

The Colorado Café Scientifique is organized by an informal group of President's Teaching Scholars and faculty from CU and institutions up and down the Front Range, as well as science fans from industry, government and elsewhere. We welcome your input, including ideas for speakers and topics. Bring them with you to the next Café, or e-mail them and any questions to John.Cohen@UCHSC.edu

Essential information on our Web site at <http://CafeSciColorado.org>