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2002

# Theoretical Analysis of Predictability, A Research Project Outline

Chu, Peter C.

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2001-2002, Principal Investigator, Theoretical Analysis of Predictability, Office of  
Naval Research

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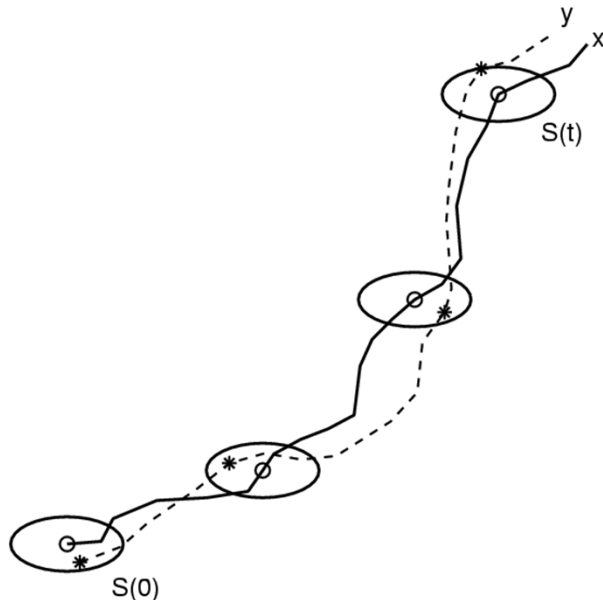
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# Theoretical Analysis of Predictability

PI: Peter C. Chu ([pcchu@nps.edu](mailto:pcchu@nps.edu)), Sponsor: ONR (Manager: Manny Fiedeiro)

2001-2002, Funding Level: \$52,000



## Brief Description

**Establishment of theoretical base for analysis of model predictability and related physical processes**

## NPS Thesis

Michael J. Roth, "[A coastal air-ocean coupled system \(CAOCS\) for east Asian marginal seas prediction](#)", MS in Meteorology and Oceanography, September 2001

## Selected Publications

Chu, P.C., and J. Lan, 2003: Extremely strong thermohaline source/sinks generated by diagnostic initialization. [Geophysical Research Letters](#), **30** (6), doi: 10.1029/2002GL016525 ([paper download](#)).

Chu, P.C., L.M. Ivanov, C.W. Fan, 2002: Backward Fokker-Planck equation for determining model valid prediction period. [Journal of Geophysical Research](#), **107**, C6, 10.1029/2001JC000879, ([paper download](#)).

Chu, P.C., L.M., Ivanov, T.M. Margolina, and O.V. Melnichenko, 2002: On probabilistic stability of an atmospheric model to various amplitude perturbations. [Journal of the Atmospheric Sciences](#), **59**, 2860-2873 ([paper download](#)).

Chu, P.C., L. Ivanov, L. Kantha, O. Melnichenko, and Y. Poberezhny, 2002: Power law decay in model predictability skill. [Geophysical Research Letters](#), **29** (15), 10.1029/2002GLO14891 ([paper download](#)).