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Theoretical Analysis of Predictability, A Research Project Outline

Chu, Peter C.

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

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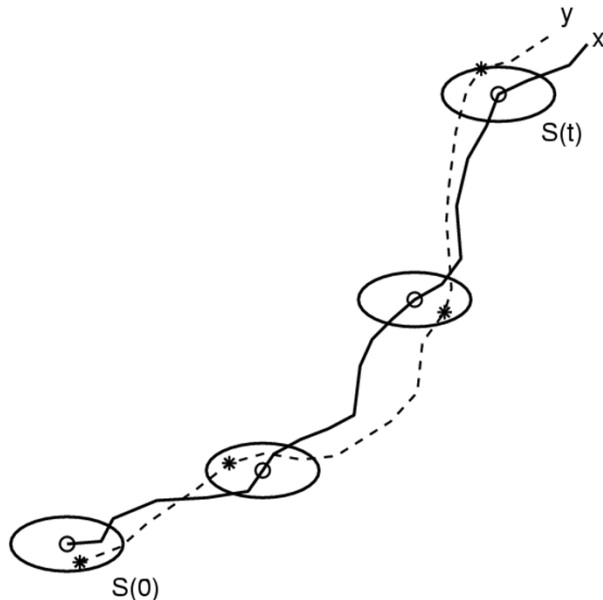
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Theoretical Analysis of Predictability

PI: Peter C. Chu (pcchu@nps.edu), 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](#)).