



HAO Colloquium Series

(Refreshments served)

Speaker: Douglas Gough, University of Cambridge (UK)

Time: 3:00–4:00 pm

Date: Wednesday, August 29, 2012

Location: CG1-2126

Title: Stoked nondynamos

Abstract:

It is common in astrophysics to assume that a turbulent fluid pervaded by a magnetic field either has an effective magnetic diffusivity much greater than its laminar-fluid value and therefore causes the field to decay more rapidly, or acts as a dynamo to sustain, or even magnify, the field, according to the outcome desired. Are these the only possibilities? Surely not. And in any given situation, can one tell which of them prevails? For example, does the sun have a dynamo? I shall not answer those questions, but instead I shall discuss an experiment with a simple ABC toy model designed to address them.