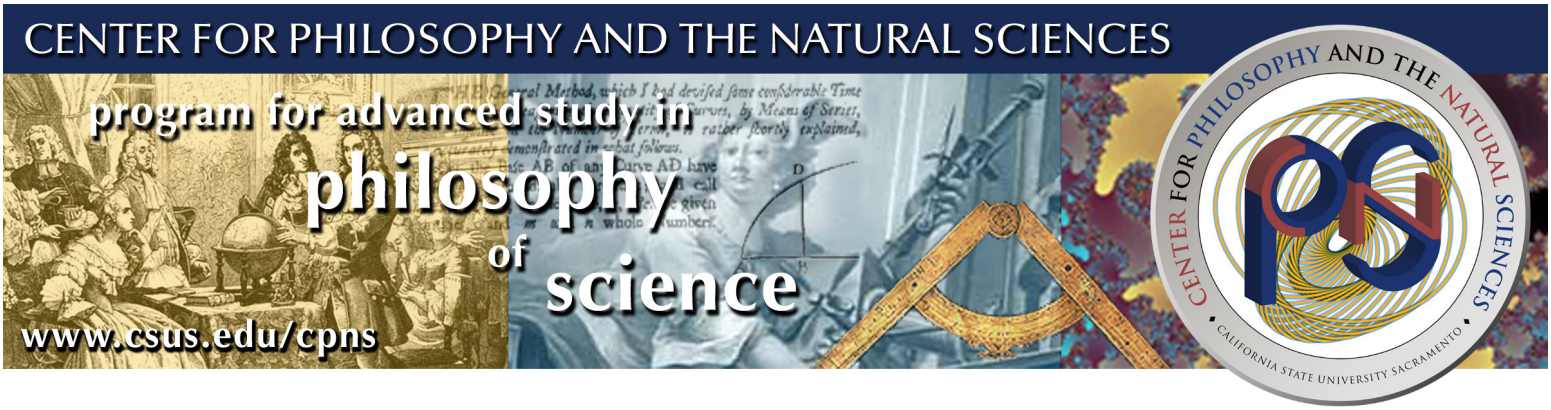

LECTURE

The Concept of Potentiality in Modern Science

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The idea that possible states of affairs play a crucial role in the description of natural processes has its origins with Aristotle. Yet with the renunciation of Aristotelian natural philosophy and the advent of classical physics, and classical mechanics in particular, the notion of potentiality has lost its importance almost entirely. In the first half of the twentieth century there were, however, at least two attempts to revitalize the concept of potentiality: On the one hand, the concept of the evolution of 'real' potential physical states in quantum mechanics, which become actualized only upon measurement; and on the other hand, Alfred North Whitehead's process metaphysics, in which so called "actual occasions" are suggested as fundamental ontological entities. Within this metaphysical scheme, the relational aspects between occasions and, in particular, the relationships between actual and potential occasions are of crucial importance.

Bschir will explore the conceptual implications and advantages for modern science in the revitalization of an ontologically relevant notion of potentiality—particularly in application to the interpretation of quantum mechanics.

DATE AND TIME: Tuesday, October 23, 2012
1:30 – 2:45

LOCATION: California State University Sacramento, University Union, Folsom Room (3rd floor).

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