



**DEPARTMENT OF PHYSICS AND PHYSICAL
OCEANOGRAPHY COLLOQUIUM**

**“From Causes to Laws: Descartes,
Malebranche, Berkeley”**

Tad M. Schmaltz

**Professor and Chair, Department of Philosophy
Duke University**

Stillman Drake has claimed that the history of science from Aristotle to Galileo involves "a process by which causes gave way to laws." Without endorsing this general thesis, I emphasize a particular development in early modern thought that does reflect a progression toward the view that the laws invoked in science—then called natural philosophy—do not concern real causality in nature. I begin with a brief consideration of the pre-modern context for later discussions of causes and laws in natural philosophy, and particularly in physics. Then I turn to the interrelated discussions of physical laws in the writings of three overlapping early modern figures: Descartes, Malebranche, and Berkeley. On my (controversial) interpretation, Descartes endorses an account of laws on which they reflect the intrinsic powers in bodies to bring about changes in motion due to collision. Given his occasionalist view that God is the only real cause, Malebranche is committed to rejecting the claim that bodies have such powers. However, his identification of laws with God's "general volitions" reveals that Malebranche retains the view that laws are tied to real causal efficacy (albeit in God rather than in nature). Though his views on natural philosophy are indebted to Malebranche's occasionalism (as modified by immaterialism), Berkeley takes a turn away from both Descartes and Malebranche in holding that physical laws involve mere correlations among phenomena, and that the natural philosopher is concerned with such laws as opposed to real causes (the latter of which are the subject of the distinct discipline of metaphysics).

**Friday, February 27, 2009
2:00 PM
DeLoach Hall, Room 212**

Refreshments will be served at 1:45 PM

