

Baylor University and CASPER present:

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Radiative Transfer using the Monte Carlo Method: Applications from Astrophysics to Biology

We will begin with a brief history of the Monte Carlo method showing the virtues and versatility of the method. A plethora of applications will be discussed ranging from radiative transfer in realistic atmosphere-ocean systems to camouflage in cephalopods. The full Mueller matrix/Stokes vector method will be used and we will show why it is the only correct way to do radiative transfer. The "backward" Monte Carlo method will also be introduced showing its usefulness in solving certain problems and how it is related to reciprocity or time reversal invariance of Maxwell's equations. This talk should be understood by all who are in attendance.

Friday, November 1, 2013, 2:30 PM Baylor Sciences Building, Room A.207

For more information, contact Sherri Honza at 254-710-1271.