



SACRAMENTO STATE

Department of Physics & Astronomy Spring 2008

Physics Colloquium Series

"Hawking/Unruh Radiation Made 'Easy' "

Despite their name, black holes are not black when one considers quantum mechanics. Viewing the event horizon as a barrier, particles can tunnel out from behind the horizon even if they are classically forbidden to do so. These tunneling particles appear as thermal radiation to an outside observer. It is possible to flesh out this physical picture with mathematical details and arrive at a simpler, more general derivation of Hawking radiation and the closely related Unruh radiation.

Douglas Singleton

Department of Physics, CSU Fresno

Thursday, March 6, 2008

***4:30-5:50 PM MND 1015**

**Note new times this semester*

Open & Free to all Students, Faculty & Public