## Abstract Submitted for the SES07 Meeting of The American Physical Society

Simulations of the Sagittarius Dwarf Galaxy Collision with the Milky Way JEANNETTE MYERS, BART SNYDER, Francis Marion University, MARY RUSTHOVEN, SC Governor's School for Science and Mathematics, LIH-SIN THE, DIETER HARTMANN, Clemson University — The Sagittarius Dwarf Galaxy is one of the satellite galaxies interacting with the Milky Way. Discovered to be located just below the galactic center; this galaxy is currently being tidally disrupted as it approaches the Milky Way disk. We performed a series of N-body/SPH simulations of the interaction between Sagittarius and the Milky Way over a 1 Gyr time period leading up to today's position. These simulations include an updated Milky Way model, gas and star formation. We highlight the creation of the tidal tails and compare them to the known tidal structures we observe today.

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Date submitted: 20 Aug 2007 Electronic form version 1.4