

**Dean's Colloquium  
Dr. Calvin Lowe, Professor  
Department of Physics**



**When: Wednesday, May 03, 2023**

**Where: Turner 129**

**Time: 3:00 – 3:20 pm, Q&A: 5 min**

**Title: Project STAR\_Lite, building a fusion science laboratory at HU**

**Abstract:** The pursuit of controlled thermonuclear fusion as a near endless source of pollution-free electricity is approaching fruition. Private investment in fusion power companies now far exceeds federal grants and “break-even” energy production has been demonstrated for laser-based fusion. It is expected that plasma-based fusion machines, like STAR\_Lite, will reach break-even in 2025. Finding scientists and engineers across all disciplines with expertise relevant to fusion energy is becoming difficult because of the hot job market. This talk is aimed at undergraduate students and even the technical parts are easily understood by anyone with a general physics background.

**Bio:** Dr. Lowe received his B.S. from North Carolina Agricultural and Technical State University, M.S. degree from MIT in plasma physics, and Ph.D. in Solid-State Physics from MIT. Having served at all professorial and administrative levels in higher education, including service as President of Bowie State University, over his 40-year career. He returned to Hampton to serve as Dean of the School of Science for 9 years before recently returning to the faculty.