



### **Joseph Burns, Mechanical & Aerospace Engineering**

Joe Burns (B.S., Hon. D.Sc., Webb Institute of Naval Architecture; Ph.D., Cornell) joined the faculty of Theoretical and Applied Mechanics in 1968 (the department merged with Mechanical and Aerospace Engineering in 2009). The Irving P. Church Professor of Engineering and a Professor of Astronomy who has taught courses in the Arts College (mathematics, astronomy and physics) and Engineering, Joe has developed significant connections across campus. Two brothers, his wife and son graduated from five different Cornell Colleges.

Burns has chaired T&AM, directed its graduate program and served on the Graduate School's General Committee. He was Vice Provost for Engineering and Physical Sciences during 2003-2007. He received Engineering's Cowie Teaching Prize in 2010. He currently is on the University Financial Policies Committee and heads Cornell's Sesquicentennial subcommittee for Engineering/Natural Sciences.

Joe has served on many advisory panels for NASA and the National Research Council, where he led the first decadal survey of planetary science. A former Vice President of the American Astronomical Society, he also chaired its divisions of planetary science and of dynamical astronomy. He's a fellow of two professional societies, a member of three foreign academies, and has received five NASA achievement awards for his research.

Joe's more than 225 scholarly publications concern solar system physics, celestial mechanics and pedagogy. He edited the principal planetary journal *Icarus* (1979-1997) and two texts about natural satellites; he's been on *Science's* Board of Editors since 2001. He's on the imaging teams of a NASA mission at Saturn and a European cometary mission. Joe has written about space policy for the *New York Times* and many other newspapers, and published popular articles in *Scientific American* and *Natural History*. Over two million viewed the Saturn exhibit he organized at NYC's American Museum of Natural History, Washington's National Air&Space Museum and Cornell's Johnson Museum.

#### **Statement:**

During the next few years, Cornell must respond to changes in public expectations and funding sources. We must compete effectively with our peers to recruit and retain the very best faculty; provide financial aid to academically talented undergraduate and graduate students; and strengthen our research infrastructure and information technology. Cornell's challenges include the launch of the NYC campus. While I support this initiative, I believe that the faculty has an important role to play in assuring that it strengthens (and does not divert resources from) our core academic mission in Ithaca.

Cornell's success requires partnerships among faculty, administrators, trustees, staff and students. If elected, I will strive to ensure that these groups act as allies, not combatants. As the faculty's representative and spokesperson at meetings with central administrators, I will be a

constructive and independent voice. I will seek to enhance faculty responsibilities for governance. I will listen to my colleagues, and be a visible and vocal advocate for them.