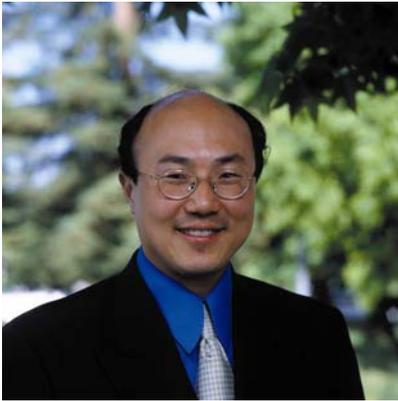


HONOLULU SUITE
2008 Circuits Luncheon
(Separate Registration Required)

Friday, June 20, 12:00 p.m.

The Great Transatlantic Cable and the Birth of Electrical Engineering, Tom Lee, Stanford University



The name Cyrus Field should be much more widely known than it is, particularly among electrical engineers. For we have him to thank for the 19th century's equivalent of the Moon program; the laying of the first transatlantic telegraph cable. Spanning the Atlantic without amplifiers isn't as easy as it sounds. Field's multiple attempts between 1858 and 1866 were punctuated by humiliating failure and the American Civil War. A board of inquiry convened in the aftermath of the first failure, identified several problems, including Field's near total reliance on a medical doctor for technical advice, as well as a frustrating lack of a technical vocabulary even to describe aspects of the failure itself. The response to this analysis was the creation of

the language and profession of electrical engineering with William Thomson, as new technical lead for the project. He was perhaps the first professional electrical engineer. For making the 1866 cable a success, Thomson was knighted that year and eventually became Lord Kelvin. This talk will describe the technical history of the cable project with a focus on how it established electrical engineering as a profession.

To register for the luncheon, please refer to the registration form for fee information.