

MAR12-2011-007947

Abstract for an Invited Paper  
for the MAR12 Meeting of  
the American Physical Society

### **Maxwellians and the Remaking of Maxwell's Equations**

BRUCE HUNT, University of Texas

Although James Clerk Maxwell first formulated his theory of the electromagnetic field in the early 1860s, it went through important changes before it gained general acceptance in the 1890s. Those changes were largely the work of a group of younger physicists, the Maxwellians, led by G. F. FitzGerald in Ireland, Oliver Lodge and Oliver Heaviside in England, and Heinrich Hertz in Germany. Together, they extended, refined, tested, and confirmed Maxwell's theory, and recast it into the set of four vector equations known ever since as "Maxwell's equations." By tracing how the Maxwellians remade and disseminated Maxwell's theory between the late 1870s and the mid-1890s, we can gain a clearer understanding not just of how the electromagnetic field was understood at the end of the 19th century, but of the collaborative nature of work at the frontiers of physics.