in intensity with respect to each other in stars of the same spectral class. He and Adams began studying this effect in more detail in an effort to determine stellar luminosities and their resulting distances (the "spectroscopic parallax"). Unfortunately for Kohlschütter, before he could follow up this work with Adams, the impending outbreak of war in Europe made him decide to return to Germany and enlist in the army. On his way east, World War I erupted and Kohlschütter soon found himself a prisoner of war in Gibraltar. In his attempts to gain his freedom, Kohlschütter managed to upset Robert S. Woodward, the Carnegie Institution's president. Woodward had Kohlschütter fired from Mt. Wilson thus preventing the latter from ever returning to California and completing his work. Further controversy developed when Kapteyn accused Adams of trying to take credit away from Kohlschütter. Kapteyn eventually resigned as Research Associate at Mt. Wilson due to the situation as he saw it. This paper will examine the development of Adams and Kohlschütter's work and the bad timing that caused the hard feelings to develop between researchers.

23.04
The Pauper and the Prince:
Ritchey, Hale and Big American Telescopes
D. E. Osterbrock (UCO/Lick Obs, UCSC)

George Willis Ritchey was famous in American astronomy in the first quarter of the twentieth century. He was the prophet and builder of the first large, successful American reflecting telescopes. An optician without equal, he was also a creative telescope designer and a master of astronomical photography. Ritchey worked closely with George Ellery Hale, the phenomenal fund-raiser and organizer of observatories. Yet their very success led to tension, estrangement, and finally to Ritchey's dismissal and banishment by Hale. Ritchey, a superb craftsman with only two years at the University of Cincinnati, had worked for Hale at Kenwood, Yerkes, and Mount Wilson Observatories. He built the Yerkes 24-inch reflector and the Mount Wilson 60-inch. With them he obtained hundreds of superb direct plates of nebulae, clusters and galaxies. He and his assistant, Henri Chrétien, conceived the Ritchey-Chrétien system in 1910. Ritchey wanted to make the 100 inch as the first telescope of this design, but this idea, problems with the faulty glass disk, the hostility of Walter S. Adams, and personal conflicts with Hale led to his firing in 1919. No other American observatory would hire him, and Ritchey scratched out a living on his orange ranch until going to France in 1924 to build a large telescope. This project fell through, and he almost starved, but he built the world's first Ritchey-Chrétien, and wrote forecasts of the great telescopes of the future. Ritchey returned to the U.S. in the Great Depression, and on a shoestring built the Naval Observatory 1-m Ritchey-Chrétien. Though he died an apparent failure in 1945, ridiculed as 'crazy' by the conventional astronomers of his time, most of Ritchey's advanced ideas on seeing, large telescopes, domes and observing have proved true in our day. He was a pioneer whose plans were far ahead of his time.