1163-01-682 **Ellen Abrams*** (`ema85@cornell.edu`), Cornell University, Ithaca, NY. *'Logical Fate' and 'Intellectual Freedom': Cassius Keyser and the Humanism of Mathematics.*

As historians have shown, mathematicians in the early-twentieth-century United States dealt with an ongoing tension between the 'autonomy' garnered through abstract mathematics and the potential to provide a 'service' through teaching and applications. Columbia mathematician Cassius Keyser, however, essentially collapsed this autonomy-service dichotomy by considering abstract mathematics itself as a service to humanity. In this talk, I offer a close reading of Keyser and his ideas in order to examine the historical value and values of American mathematics. In his 1922 Mathematical Philosophy: A Study of Fate and Freedom, Keyser detailed his conceptions of modern mathematics as well as his broader concerns about American culture. On one hand, Keyser worked to defend mathematics from critiques that its modern, axiomatic form had become a lifeless trick of mechanics, detached from both the physical world and human spirit. On the other hand, he used postulate systems and doctrinal functions to define mathematics and to promote its claims to human concern. Perhaps because technoscientific justifications for mathematics became especially powerful in the aftermath of World War II, Keyser's humanistic conception of mathematics, though well-regarded at the time, has since been overlooked. (Received September 11, 2020)