Takumi Noda* (takumi@ge.ce.nihon-u.ac.jp), 1 Nakagawara, Tokusada, Tamuramachi, Koriyama, Fukushima 963-8642, Japan. A transformation formula for a certain kind of Eisenstein series in aerodynamic interference calculations.

In 1949, F. Olver established a transformation formula which converts a certain slowly convergent series into a rapidly convergent and easily computable form. The original (double) series occurs in aerodynamic interference calculations, and its numerical estimates have some practical importance. In this talk, we revisit this double series from the point of view of analytic number theory, and show the transformation property as a corollary of the Fourier-type expansion of a certain kind of non-holomorphic Eisenstein series by employing Mellin-Barnes integral transformations. (Received August 09, 2013)