HARVARD UNIVERSITY 17 Oxford Street Cambridge, MA 02138



Tuesday, August 11, 2020, at 10:00 (Boston) 15:00 (UK/Eire) 16:00 (C.Europe) 22:00 (China) Mathematical Picture Language Seminar (Joint with the Dublin Institute for Advanced Studies) Zoom at: <u>https://harvard.zoom.us/j/779283357</u>

Integrability, rationality and convolutions Marianne Leitner, Dublin Institute for Advanced Studies

Abstract: The Eisenstein-Kronecker function is a useful object in number theory and physics. It is a tool for proving rationality for period integrals of cusp forms. It generates integration kernels of elliptic polylogarithms which express Feynman diagrams on the torus. It is the central object in the construction of elliptic R-matrices. We propose a new description in terms of iterated convolutions of the Eisenstein zeta function and discuss its features in the various settings.

