Extending the weak order on Coxeter groups

Francois Viard[*1,2]

[1]Université Lyon 1, Institut Camille Jordan, UMR 5208 du CNRS, 69622 Villeurbanne, France – United States
[2]Institut Camille Jordan [Villeurbanne] (ICJ) – Centre National de la Recherche Scientifique : UMR5208, Université Jean Monnet [Saint-Etienne], Institut National des Sciences Appliquées de Lyon, Ecole Centrale de Lyon, Université Claude Bernard Lyon 1 – Bât. Jean Braconnier 43 bd du 11 novembre 1918 69622 VILLEURBANNE CEDEX, France

Abstract

We introduce a new family of complete lattices, arising from a digraph together with a valuation on its vertices and generalizing a previous construction of the author. We then apply this to the study of two long-standing conjectures of Dyer, and we provide a description of the Tamari lattice with this theory.

[*]Speaker