1116-55-1714 Christin Bibby* (cbibby2@uwo.ca) and Justin Hilburn. Quadratic-linear duality and rational homotopy theory of chordal arrangements.
To any graph and smooth algebraic curve $C$ one may associate a "hypercurve" arrangement and one can study the rational homotopy theory of the complement $X$. In the rational case $(C=\mathbb{C})$, there is considerable literature on the rational homotopy theory of $X$, and the trigonometric case $\left(C=\mathbb{C}^{\times}\right)$is similar in flavor. The case of when $C$ is a smooth projective curve of positive genus is more complicated due to the lack of formality of the complement. When the graph is chordal, we use quadratic-linear duality to compute the Malcev Lie algebra and the minimal model of $X$, and we prove that $X$ is rationally $K(\pi, 1)$. (Received September 21, 2015)

