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*Two approaches to geometric vertex decomposition*

Geometric vertex decomposition was first introduced by Knutson-Miller-Yong to study diagonal degenerations of Schubert varieties. Later results on the topic were mostly formulated in the context of Schubert geometry, until very recent work of Klein-Rajchgot established a connection between liaison theory and geometric vertex decomposition. For homogeneous Cohen-Macaulay ideals, being geometric vertex decomposable is in some sense equivalent to being glicci (i.e. is in the Gorenstein liaison class of a complete intersection). The interplay between these two theories can be used to analyze degenerations and to construct Gröbner bases. I will highlight the first approach and its application to toric ideals of graphs, and provide an overview of the second approach in the context of Hessenberg varieties.