The First Seminar on Combinatorial Commutative Algebra, February 10, 2010, IPM, Tehran

Shellable Quasi Forests and Their h-triangles

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As proven by Herzog et al. a quasi forest Δ is pure shellable if and only if $h_i(\Delta) = 0$ for all i > 0. If we replace *h*-vector with *h*-triangle, we can show that the *h*-triangle of shellable quasi forests have a particular form. As a matter of fact, except the first and the second columns the rest of the entries are zero.

In addition, we prove that a quasi forest is shellable if and only if it is vertex decomposable.

This is a joint work with S. Yassemi.