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Quasigeodesics in the pants complex and the conjugacy problem in braid groups

I shall present some ideas on how to estimate distances in the pants complex, or equivalently in the Teichmueller space with the Weil–Peterson metric, of an n times punctured sphere. Then I want to explain how such estimates could be used to solve the conjugacy problem in the 4 strand braid group in polynomial time. This is work in progress.