Abstract: I will outline the interaction of three seemingly disparate topics: Heegaard splittings, the virtually Haken conjecture and Property tau. The latter is a concept due to Lubotzky and Zimmer, that is defined in terms of eigenvalues of the Laplacian, graph theory or representation theory, and is related to Property T. I will formulate a conjecture about Heegaard splittings, and will show how this and a conjecture of Lubotzky and Sarnak about Property tau implies the virtually Haken conjecture for hyperbolic 3-manifolds. I will also show that the positive virtual $b_1$ conjecture has equivalent formulations in terms of Heegaard splittings, and in terms of the behavior of the Laplacian.