

On the cycle double conjecture

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I shall

- (1) survey some of my work (jointly with Sean McGuinness on the one hand, with Klas Markström on the other, and ongoing meaning not yet in report form with Herbert Fleischner on the third (?)) on the cycle double conjecture
- (2) mention at least one of Herbert Fleischner's wonderful, old theorems on the Sabidussi conjecture which we, Herbert and I, during a hot week in Vienna last year managed to trivially yield the statement that the strong cycle double conjecture is true for hypohamiltonian graphs
- (3) no doubt fill whatever time remains with some hopefully not hopelessly hard questions such as the following (in joint work with Klas Markström): Assume that the 3-regular graph G is obtained from a 3-regular graph H , all of whose components have a proper 3-edge-colouring where every pair of colour classes form a hamiltonian cycle, by the rule that into each component of H we insert an even number of vertices into the edges and arbitrarily adding a matching incident with the new vertices. Show that G has a cycle double cover!