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Topological 4-manifolds with right-angled Artin fundamental groups

In this talk I will discuss the classification of closed, topological spin 4-manifolds with fundamental group π of cohomological dimension ≤ 3 (up to s-cobordism). In general we must also assume that π also satisfies certain K-theory and assembly map conditions. Examples for which these conditions hold include the torsion-free fundamental groups of 3-manifolds and all right-angled Artin groups whose defining graphs have no 4-cliques.