Domination of Nanotube Fullerenes

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A fullerene graph is a finite, simple, planar, 3-regular graph such that in every planar embedding, each face is a pentagon or a hexagon. These model carbon-cage molecules. We investigate classes of fullerenes with the goal of developing an upper bound on the domination number of a fullerene on n vertices. In particular, we give an upper bound on the domination number of narrow closed nanotubes.

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