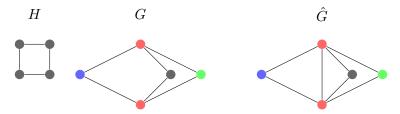
The Hardness of H-Free Edge Editing

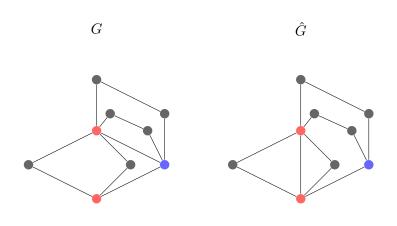
N.R.Aravind

Indian Institute of Technology Hyderabad

H-Free Graphs



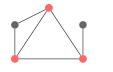
 \hat{G} is C_4 -free, i.e. has no induced copies of C_4 .



Reduction from high-degree vertices

Lemma

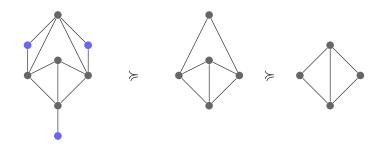
H-FEE $> H_1$ -FEE, where $H_1 = H[v: deg(v) > d]$.



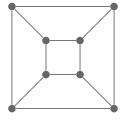




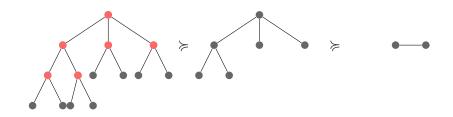
High-degree reduction

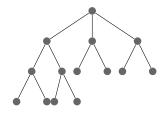


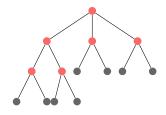
Obstacle 1: Regular graphs

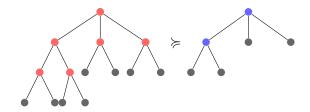


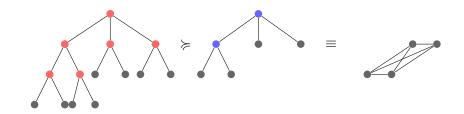
Obstacle 2: Easy graphs











High-degree reduction

