



THE UNIVERSITY
OF BRITISH COLUMBIA



Ning Zhang

Attributed Graph Alignment

Program: MSc in Information Theory

Supervisor: Dr. Lele Wang

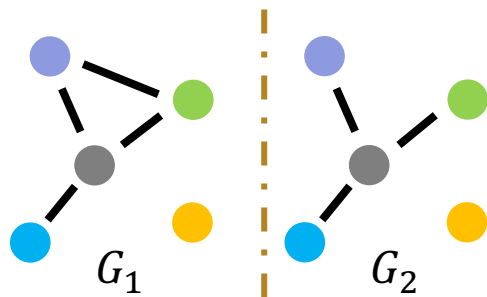


Fig1. Protein-protein interaction networks (PPI networks)

Existing model: **graph alignment**

- Given $G_1 = (V_1, E_1)$, $G_2 = (V_2, E_2)$
- Find **bijection** between V_1 and V_2

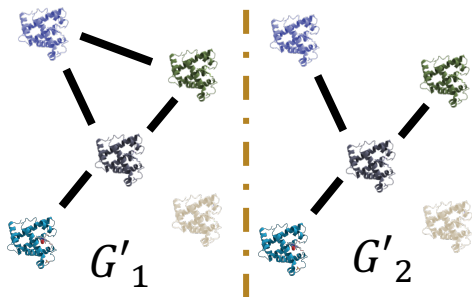


Fig2. PPI networks with amino acid sequence of each protein

Proposed model: **attributed graph alignment**

- Given $G'_1 = (V_1, E_1, A_1)$, $G'_2 = (V_2, E_2, A_2)$
- Find **bijection** between V_1 and V_2

Goal: quantify the benefit brought by **attributes**