## Protein-Protein Binding Affinity

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## Protein Interaction Problem

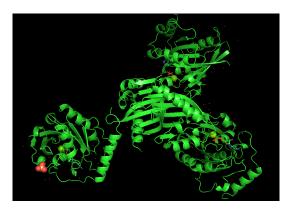


Figure 1: Protein Complex Example

```
 \begin{split} \mathcal{A} &= \{ \textit{Ala}, \textit{Arg}, \textit{Asn}, \dots, \textit{Val} \} \\ \textit{a}_i &\in \mathbf{R}^3 \text{ - atom} \\ \textit{PR} &= \{ \textit{a}_i \} \in \mathbf{R}^{3^*} \text{ - single protein} \\ \textit{PC} &= (\textit{PR}_0, \textit{PR}_1) \text{ - protein complex} \end{split}
```