





*Property estimation*

- **Vision-based expected friction coefficient**
  - Surface material dataset with friction coefficients [Brandão, M., et al. (2016)]
  - Friction from vision (e.g. surface roughness, material similarity) [Noh, D., et al. (2020)]

- **Traversability estimation**
  - Traversability by vision  
[Shneier, M., et al. (2006)]
  - Self-supervised traversability with percepts  
[Gan, L., et al. (2022)]

- **Multimodal motion policies**
  - Surface estimation through inference  
[Ewan, P., et al. (2022)]\*
  - Reinforcement Learning  
[Margolis, G., et al. (2023)]

**heavily dependent on  
semantic prediction**

**possibly ill-posed**



**one-way conditioning of  
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*Approach: Feel it*