# 輝度変化の類似度に基づく物体形状復元

Shape Reconstruction based on Similarity in Radiance Changes under Varying Illumination

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## Objective

#### • Novel Technique for Photometric Stereo



Shape recovery **only** from a set of images taken under varying lighting

- Unknown reflection model
- Unknown illumination conditions

cf. model-based approach, example-based approach

### **Proposed method**

### Key Idea

### Similarity in Radiance Profiles (N-d vectors)

#### Similarity in Normals (3-d vectors)



Estimating surface normals via dimensionality reduction

