

STEVEN HAKER**Surgical Planning Lab/Harvard Medical School***Optimal Mass Transport and Image Registration*

We present elastic image registration methods based on the Monge - Kantorovich problem of optimal mass transport. Applications will be in the area of medical imaging. In particular, we show how area- preserving surface warpings (e.g. flattenings) may be obtained using this approach. We also demonstrate the mapping of volumetric medical data sets such as those obtained from MR and CT.