Supplementary Material

Below we provide some additional results of our method as well as comparisons with other methods.

Figure 1: Projection of a simple holomorphic mapping. (a) The image of the input mapping, $f(z) = (z - 0.05)^2$ applied to the unit disk domain (g). The mapping is not locally injective and has a singular point at $z = 0.05$ where $f_z = 2(z - 0.05)$ vanishes. The isometric distortion at the singularity is infinite since $\sigma_f(0.05) = 0$. This is evident by the color visualization of the isometric distortion (h). Our projection operator removes the singularity while [Aigerman13] and [Kovalsky15] maintains it. [Lipman12] pushes the singularity to the boundary and similarly [Chen15] whose result is smoother.

(a) Input
(b) [Lipman12]
(c) [Aigerman13]
(d) [Kovalsky15]
(e) [Chen15]
(f) Ours ($H$)

Figure 2: Pants. Constraints: $\sigma = 0.4, \Sigma = 2.5$. (g) Domain. (h) Isometric distortion $\tau_f$ visualization of (a-f).

(a) Input (Cauchy)
(b) [Lipman12]
(c) [Aigerman13]
(d) [Kovalsky15]
(e) [Chen15]
(f) Ours ($L_{\nu}$)

Figure 3: Elf. (g) Domain. (h) Isometric distortion $\tau_f$ visualization of (a-f).

(a) Input (har-ARAP)
(b) [Lipman12]
(c) [Aigerman13]
(d) [Kovalsky15]
(e) [Chen15]
(f) Ours ($L_{\nu}$)
Figure 4: Pants. (g) Domain. (h) Isometric distortion $\tau_f$ visualization of (a-f).

Figure 5: Square. (g) Domain. (h) Isometric distortion $\tau_f$ visualization of (a-f).

Figure 6: Troll. (g) Domain. (h) Visualization of the conformal distortion $k_f$.

Figure 7: Taz. (g) Domain. (h) Isometric distortion $\tau_f$ visualization of (a-f).