$$\varphi \colon (\mathbb{S}^3 \times \mathbb{R}_u, d(e^*\alpha_{\mathbb{S}^3})) \to (T^*\mathbb{R}^2 \setminus \{\mathbf{0}, \mathbf{0}\}), dx_1 \wedge dy_1 + dx_2 \wedge dy_2); (z_1, z_2, u) \mapsto e^{u/2}(r_1 \cos\theta_1, r_2 \cos\theta_2, r_1 \sin\theta_1, r_2 \sin\theta_2)$$