Steerers: A framework for rotation equivariant keypoint descriptors

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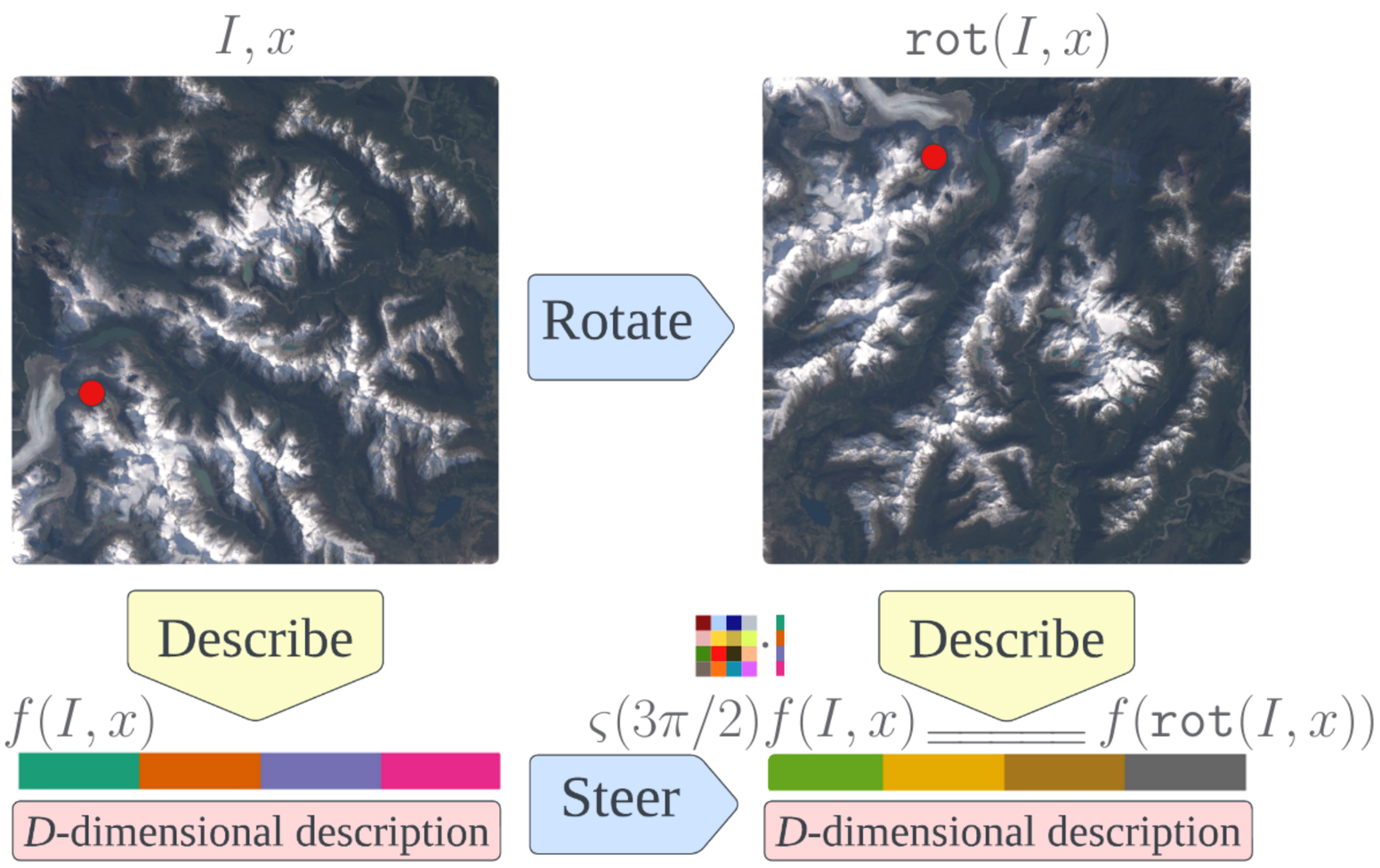
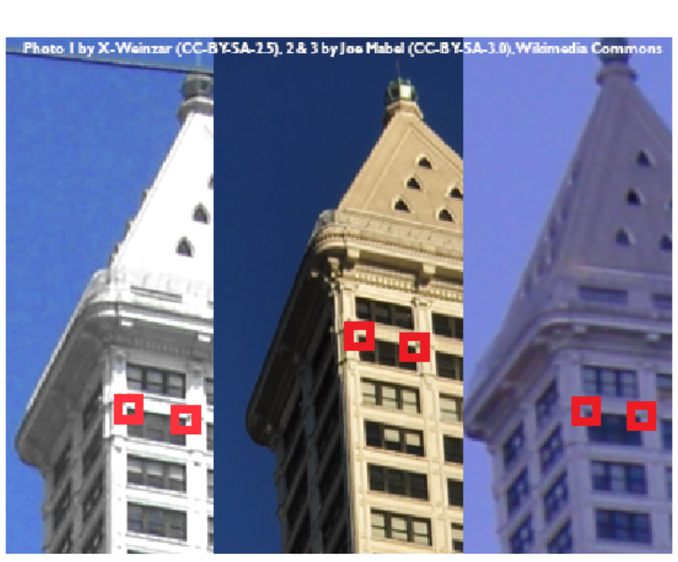
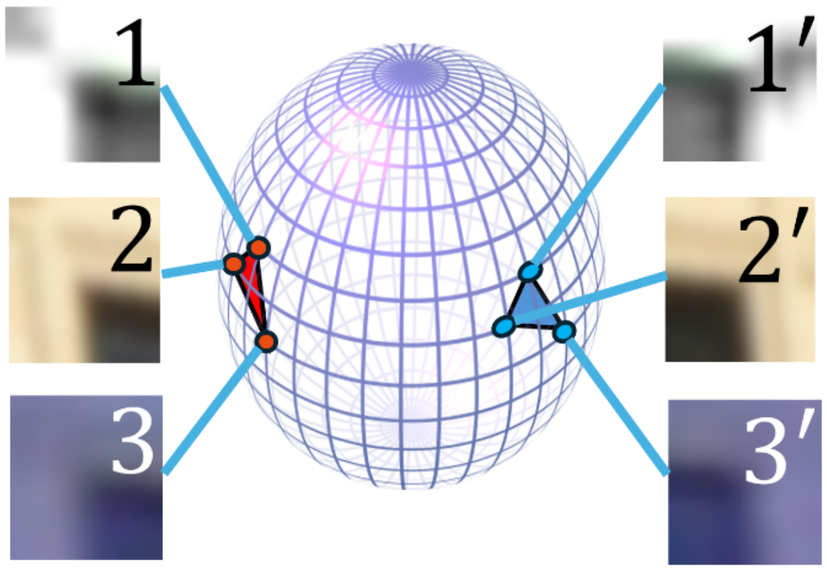


Keypoint description is a naturally rotation equivariant task

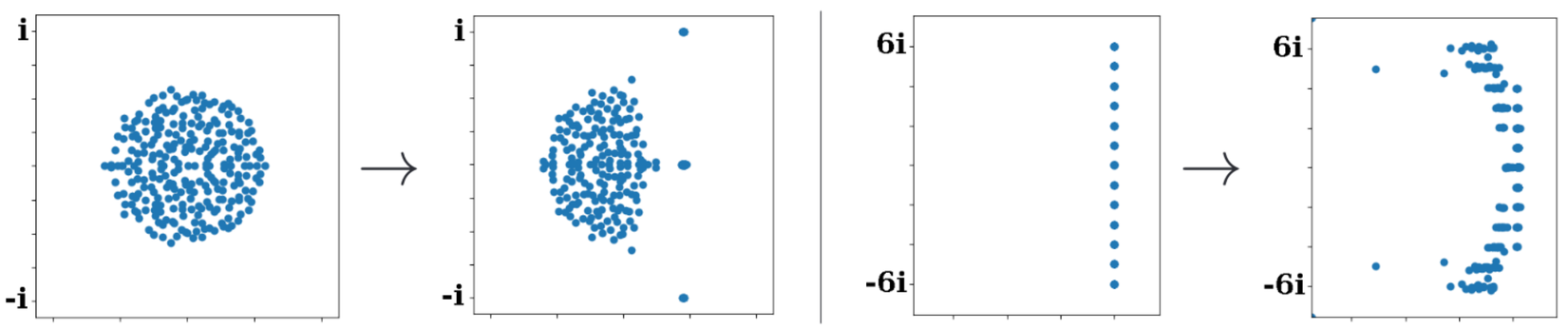




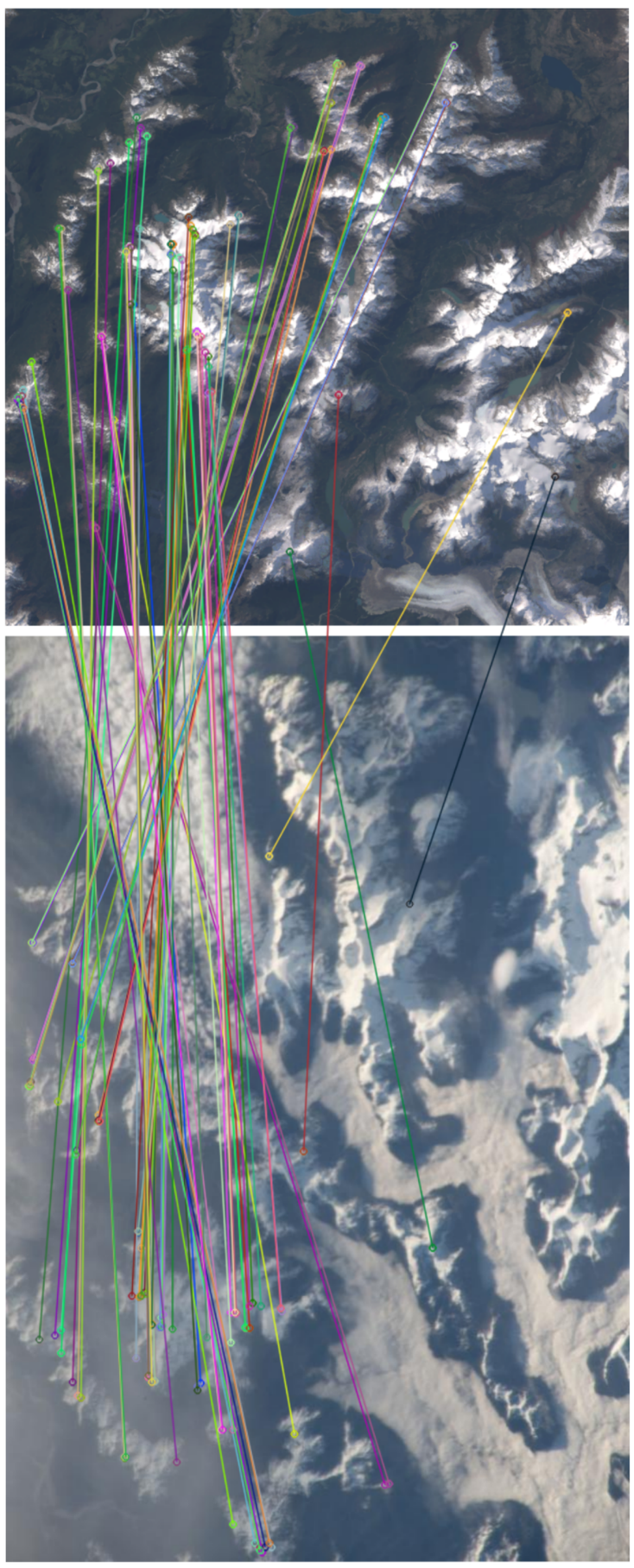
$$\langle f(I, x_i), f(I, x_j) \rangle \approx \langle f(I, x_{i'}), f(I, x_{j'}) \rangle$$

Keypoint description can be used to study learning of optimal representations

$$\varsigma(\alpha) = Q^{-1} \exp(\mathrm{diag}(\mathbf{i} j_1 \alpha, \mathbf{i} j_2 \alpha, \ldots, \mathbf{i} j_D \alpha)) Q, \quad j_d \in \mathbb{Z}$$



Rotation equivariant descriptors are practically useful for invariant keypoint matching



Main conference
Wednesday PM
Orals 2C, #5
Poster session 2, #5

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