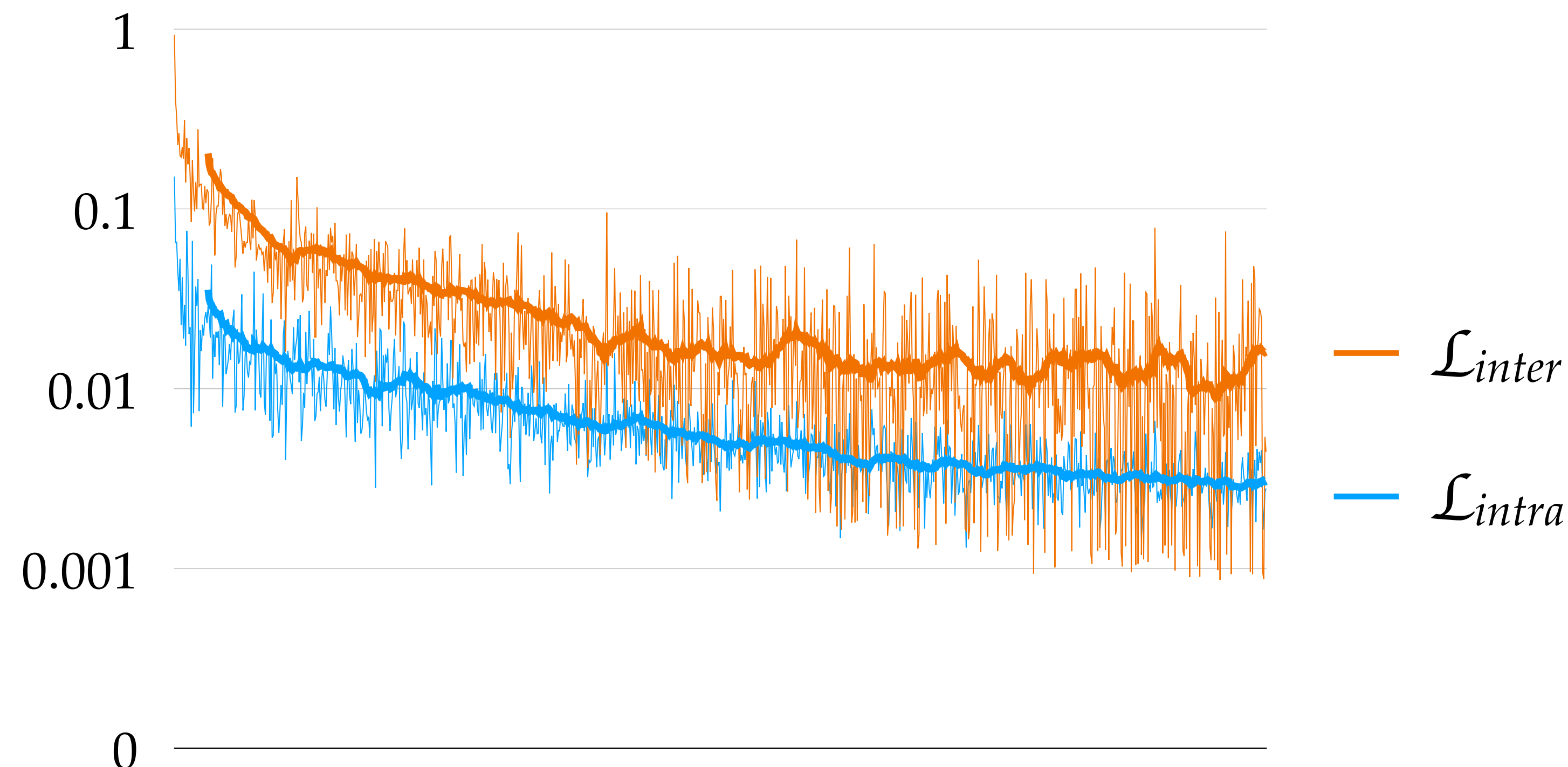


Problem: Stuck at well-converged  $\mathcal{L}_{intra}$

Proposal:  $\mathcal{L}_{emb} = [\hat{\mathcal{L}}_{inter} + m] \cdot \mathcal{L}_{inter} + [\hat{\mathcal{L}}_{intra} + m] \cdot \mathcal{L}_{intra} \quad (m := 0.25)$

Inspired by:

Y. Sun et al. *Circle loss: A unified perspective of pair similarity optimization*. CVPR 2020.

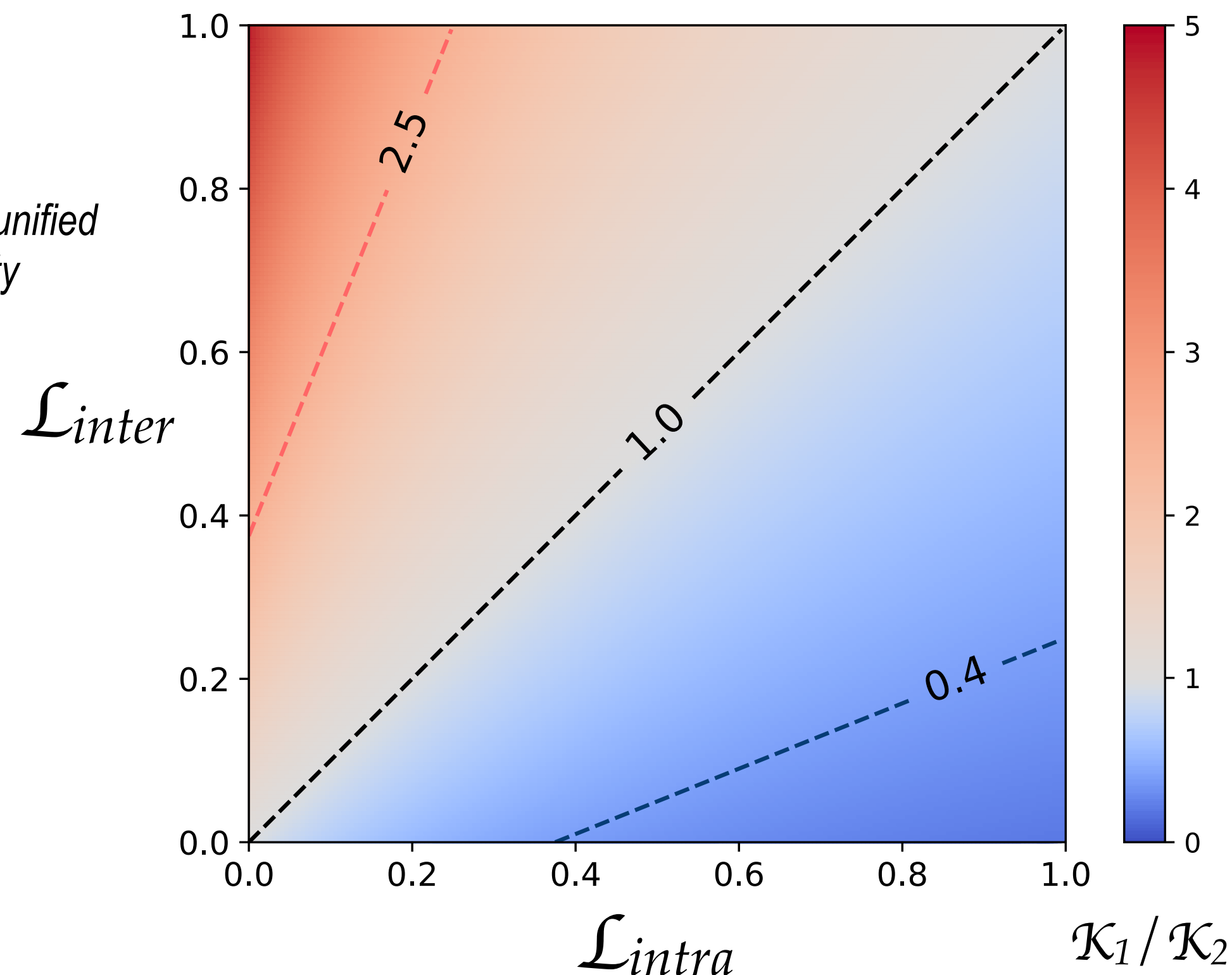


Problem: Stuck in well converged  $\mathcal{L}_{intra}$

Proposal:  $\mathcal{L}_{emb} = [\hat{\mathcal{L}}_{inter} + m] \cdot \mathcal{L}_{inter} + [\hat{\mathcal{L}}_{intra} + m] \cdot \mathcal{L}_{intra} \quad (m := 0.25)$

Inspired by:

Y. Sun et al. *Circle loss: A unified perspective of pair similarity optimization*. CVPR 2020.



$\mathcal{K}_1 / \mathcal{K}_2$  (ratio of weights)

$$= [\hat{\mathcal{L}}_{inter} + 0.25] / [\hat{\mathcal{L}}_{intra} + 0.25]$$