Style-Based Global Appearance Flow for Virtual Try-On

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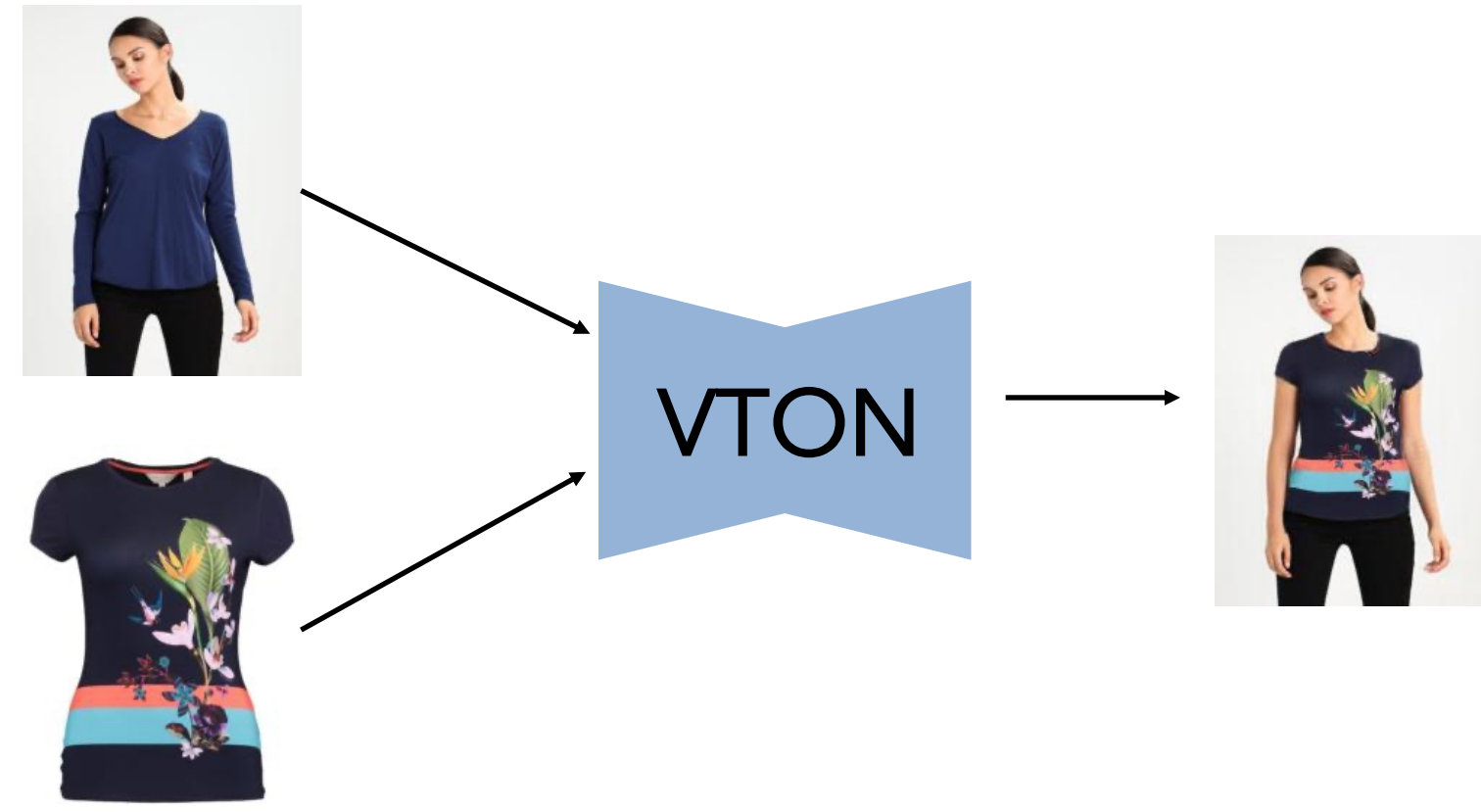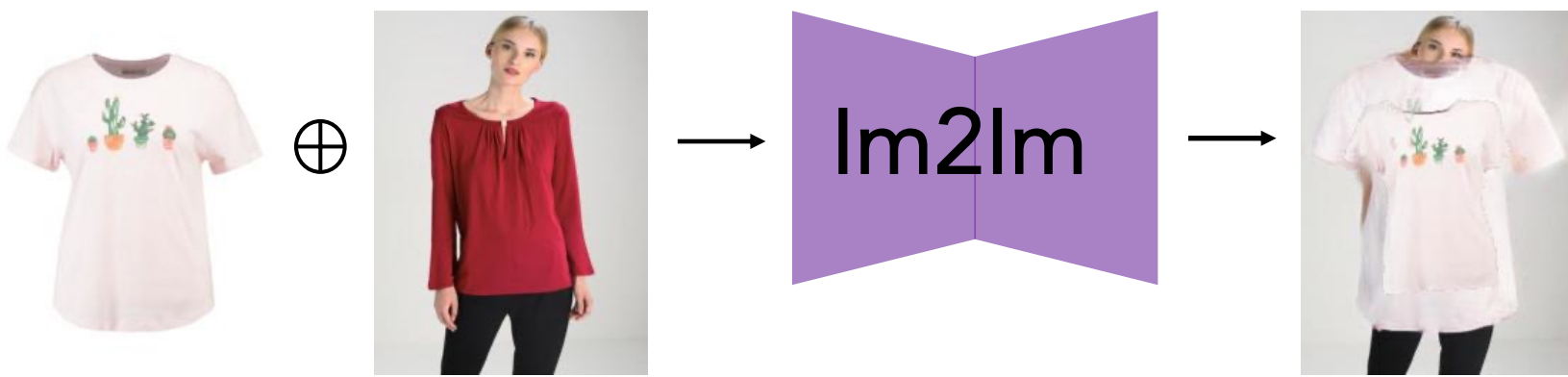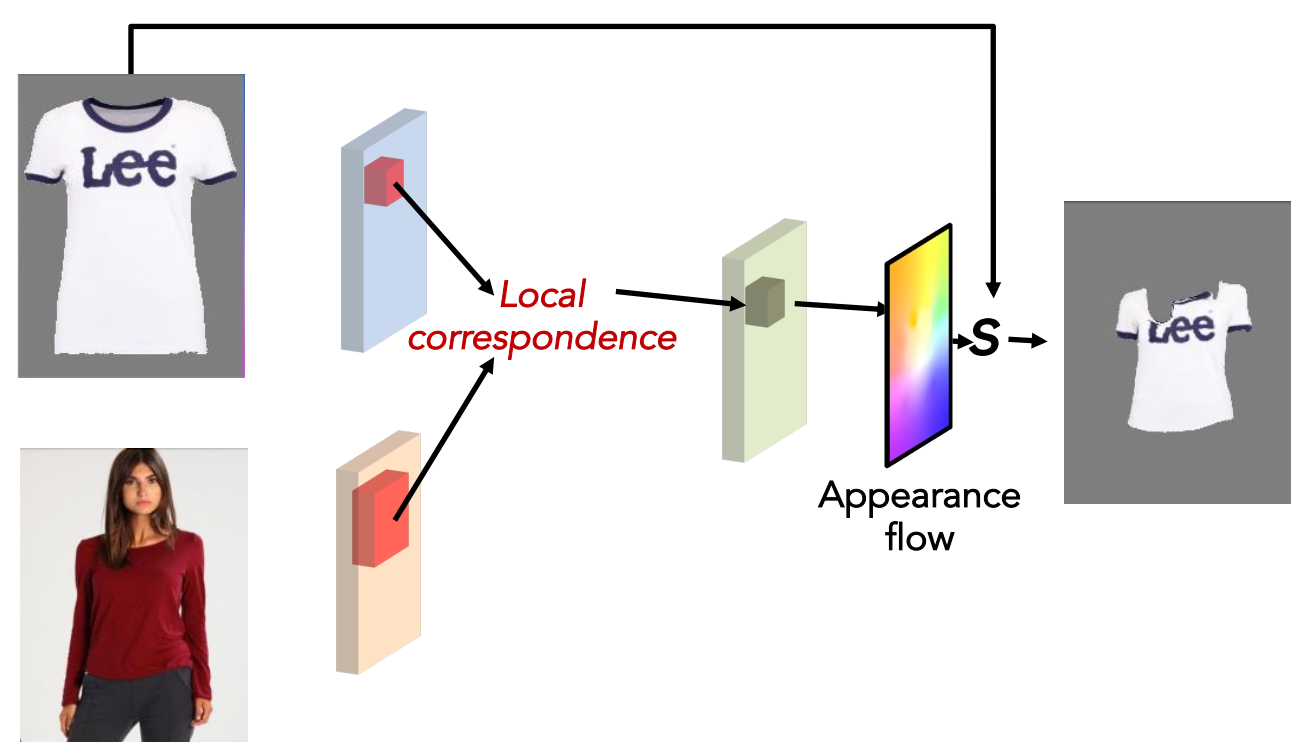CVPR JUNE 19-24 2022 NEW ORLEANS LOUISIANA

- **Image-based Virtual Try-on**

- **Main Challenge - Misalignment**

- **Existing SOTA Methods and Their Limitations**
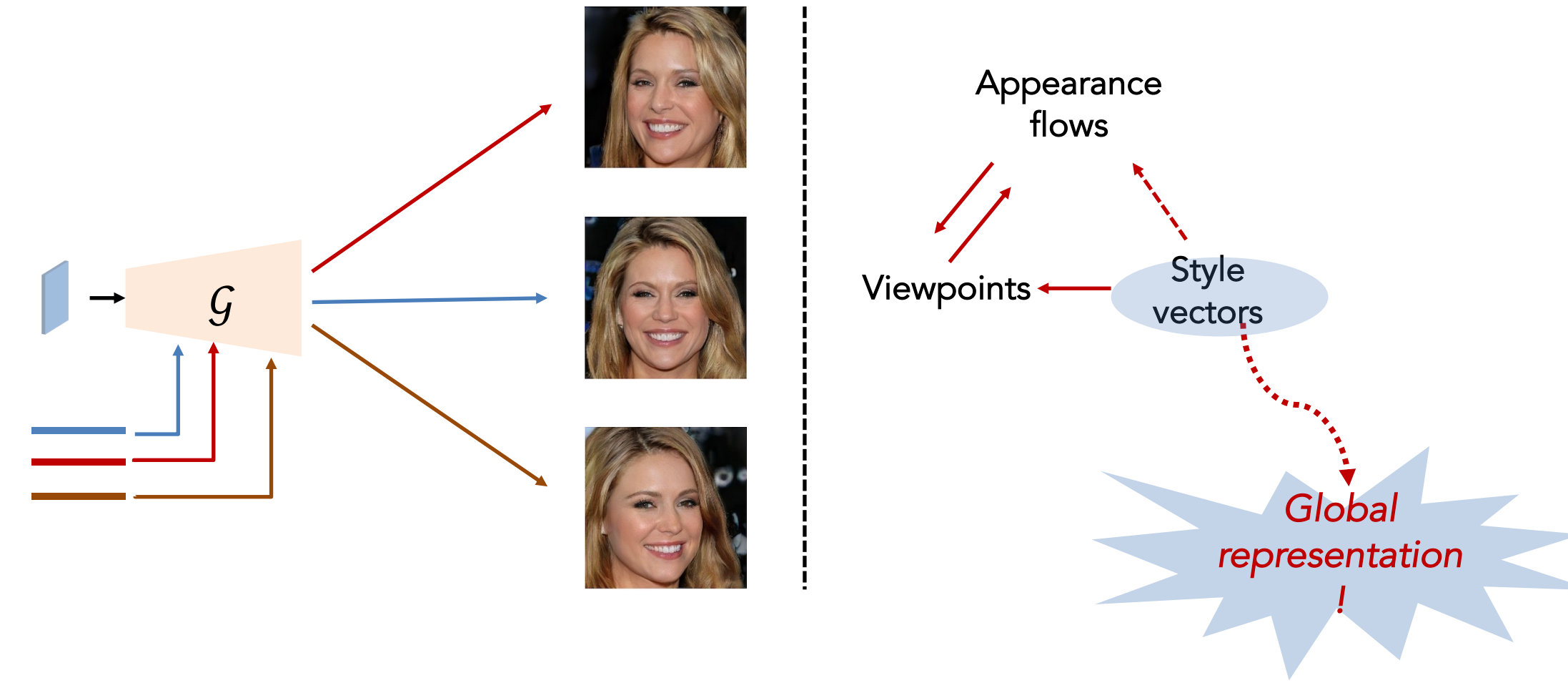
Garment warping via appearance flow
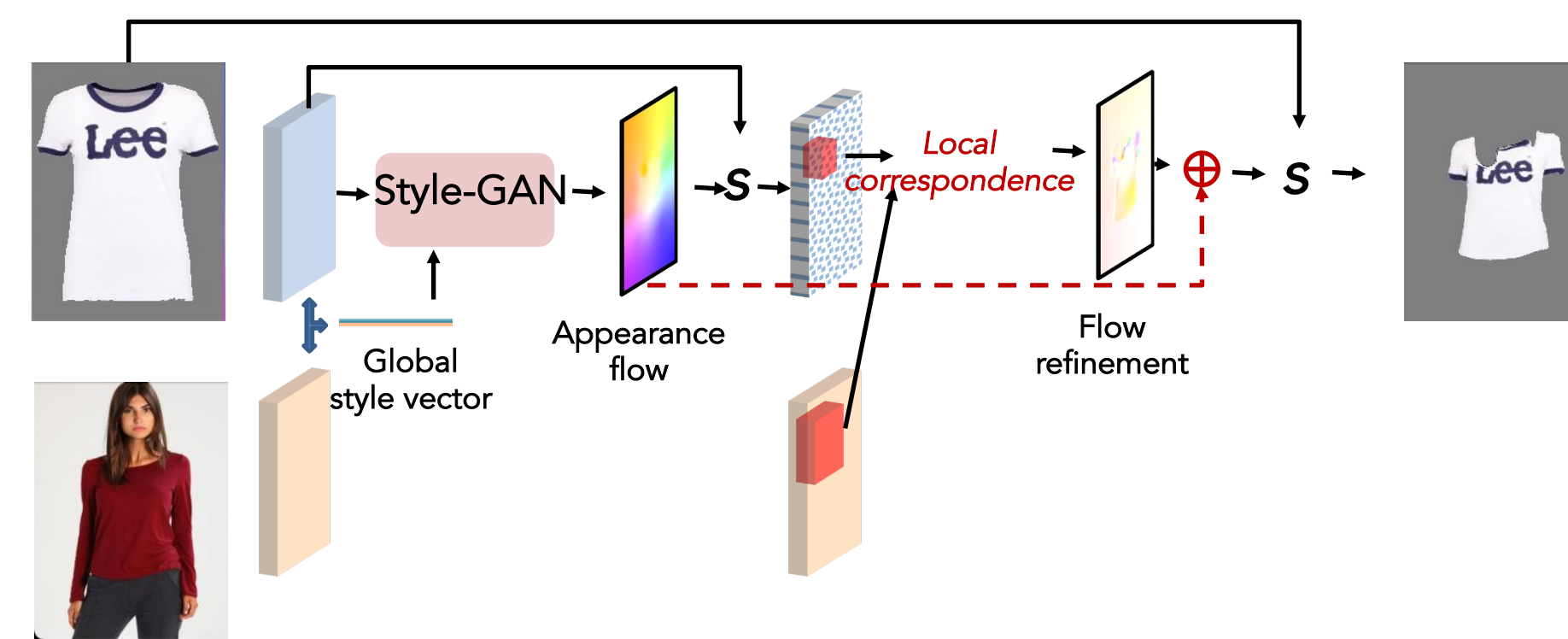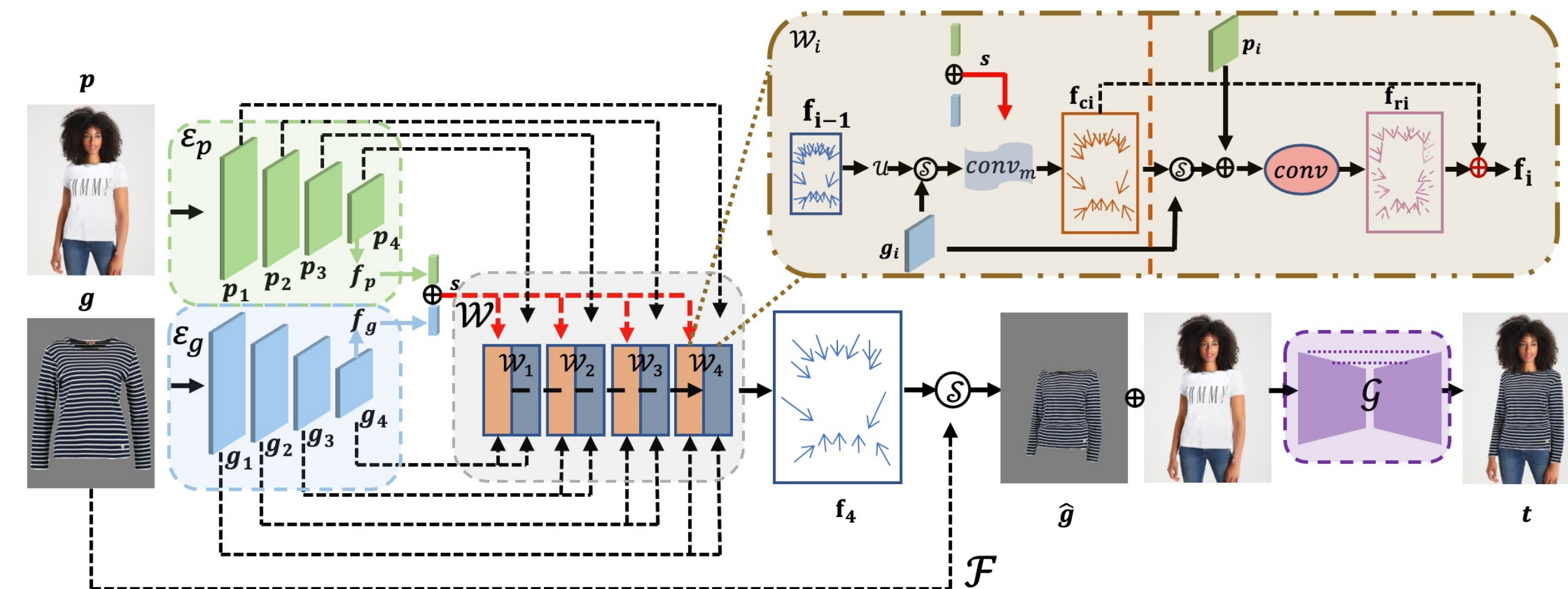
Limitation

Cannot handle large misalignment!

- **Our Motivation - Style-GAN based image geometric manipulation**

- **Our Method - Style-based appearance flow estimation**

- **Our Model**

- **Qualitative Results**
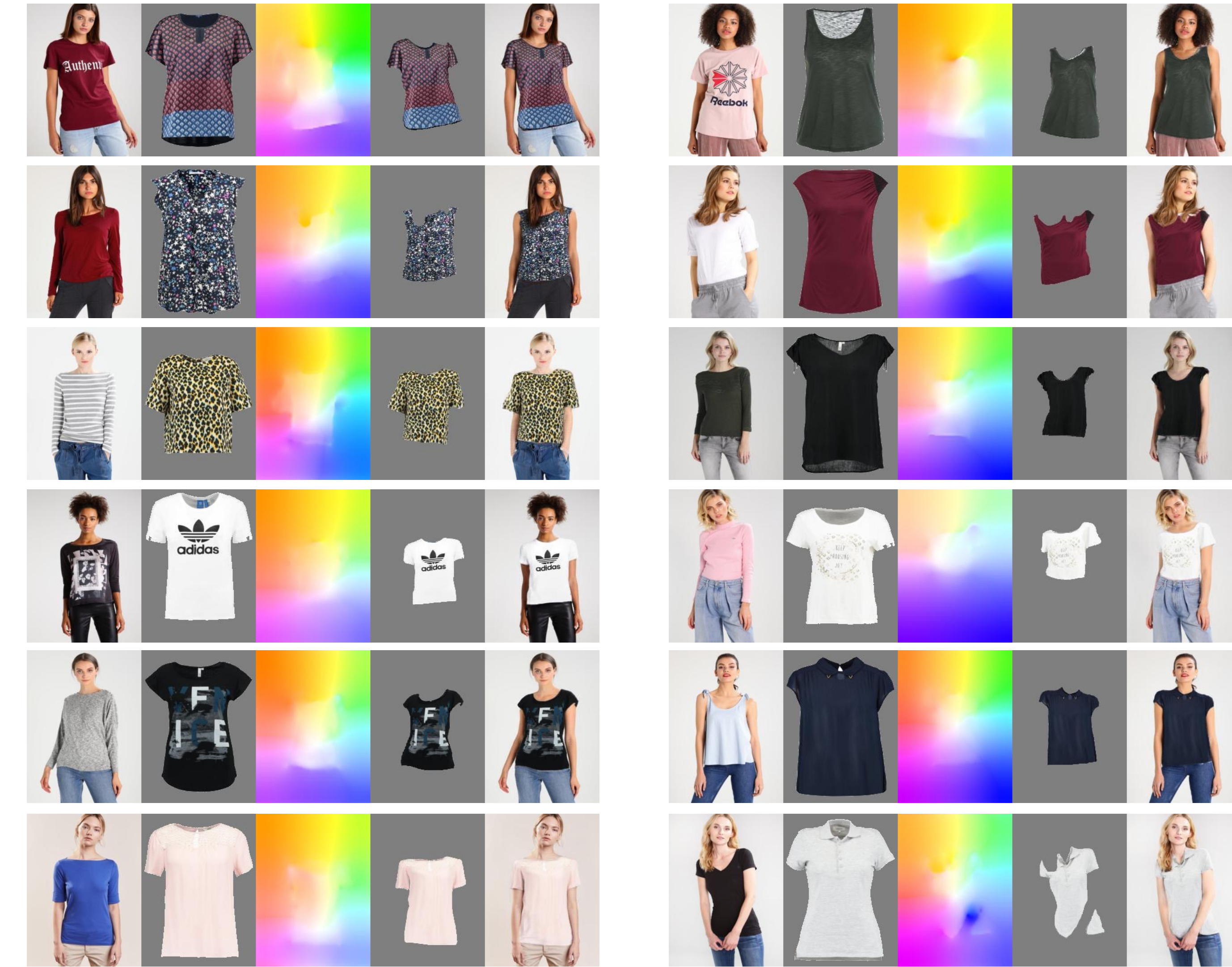
- **Quantitative Results**

Methods	Warping	Parser	SSIM ↑	FID↓
VTON [14]	TPS	Y	0.74	55.71
CP-VTON [37]	TPS	Y	0.72	24.45
CP-VTON++ [25]	TPS	Y	0.75	21.04
Cloth-flow [13]	AF	Y	0.84	14.43
ACGPN [41]	TPS	Y	0.84	16.64
DCTON [9]	TPS	Y	0.83	14.82
PF-AFN [10]	AF	N	0.89	10.09
Zflow [5]	AF	Y	0.88	15.17
Cloth-flow* [13]	AF	N	0.89	10.73
Ours	AF	N	**0.91**	**8.89**

Table 1. Quantitative results of different models on VITON. Warping represents the warping methods used in different models. Parser indicates whether human parser is used in the model during inference. TPS: Thin Plate Spline. AF: Appearance Flow. ⋆: re-trained with parser free training paradigm.