

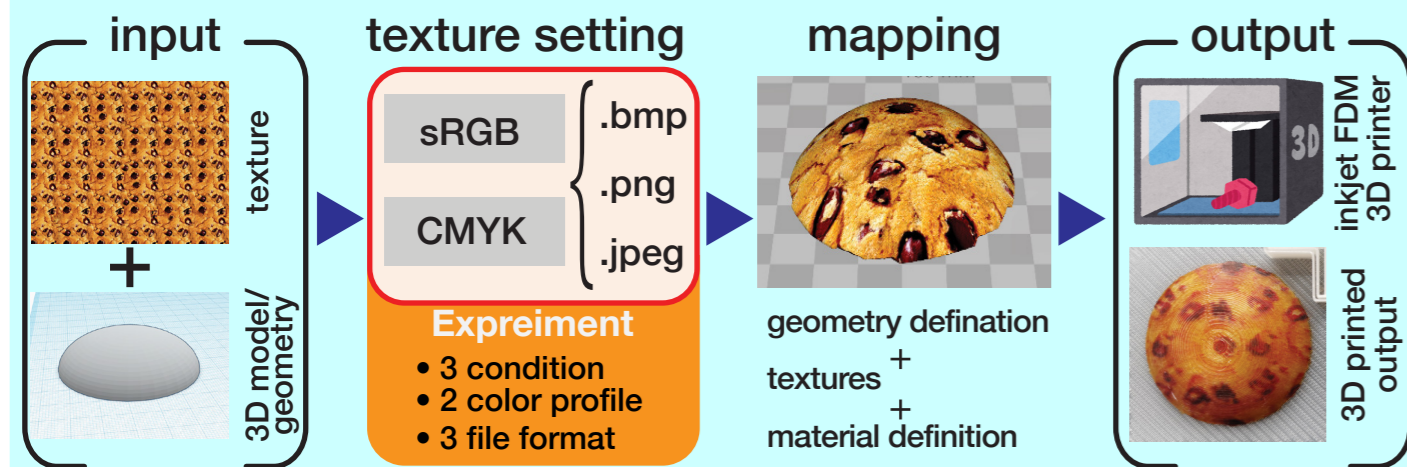
# Color Reproduction Framework for Inkjet FDM 3D Printers

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Recent consumer-grade 3D printers have enabled the fabrication in full color. However, the printed colors are different from the actual user desired colors.

3D printed color  $\neq$  design color

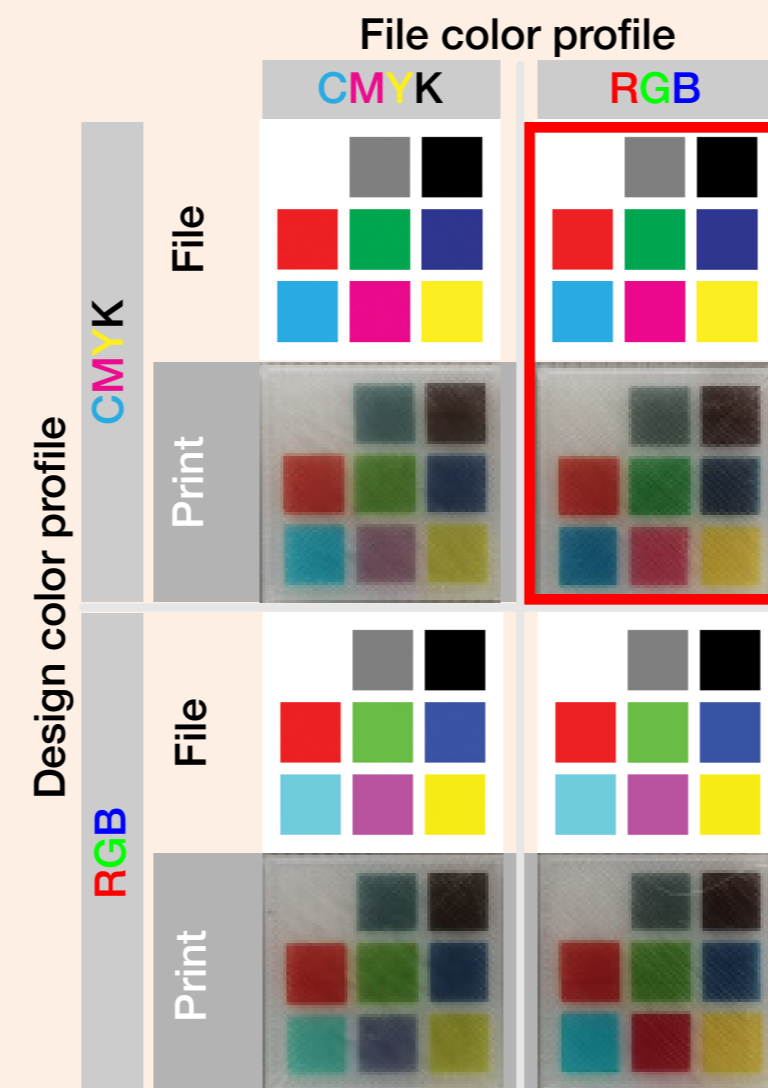
A preliminary experiment to investigate color reproduction errors in consumer-grade inkjet FDM 3D printers



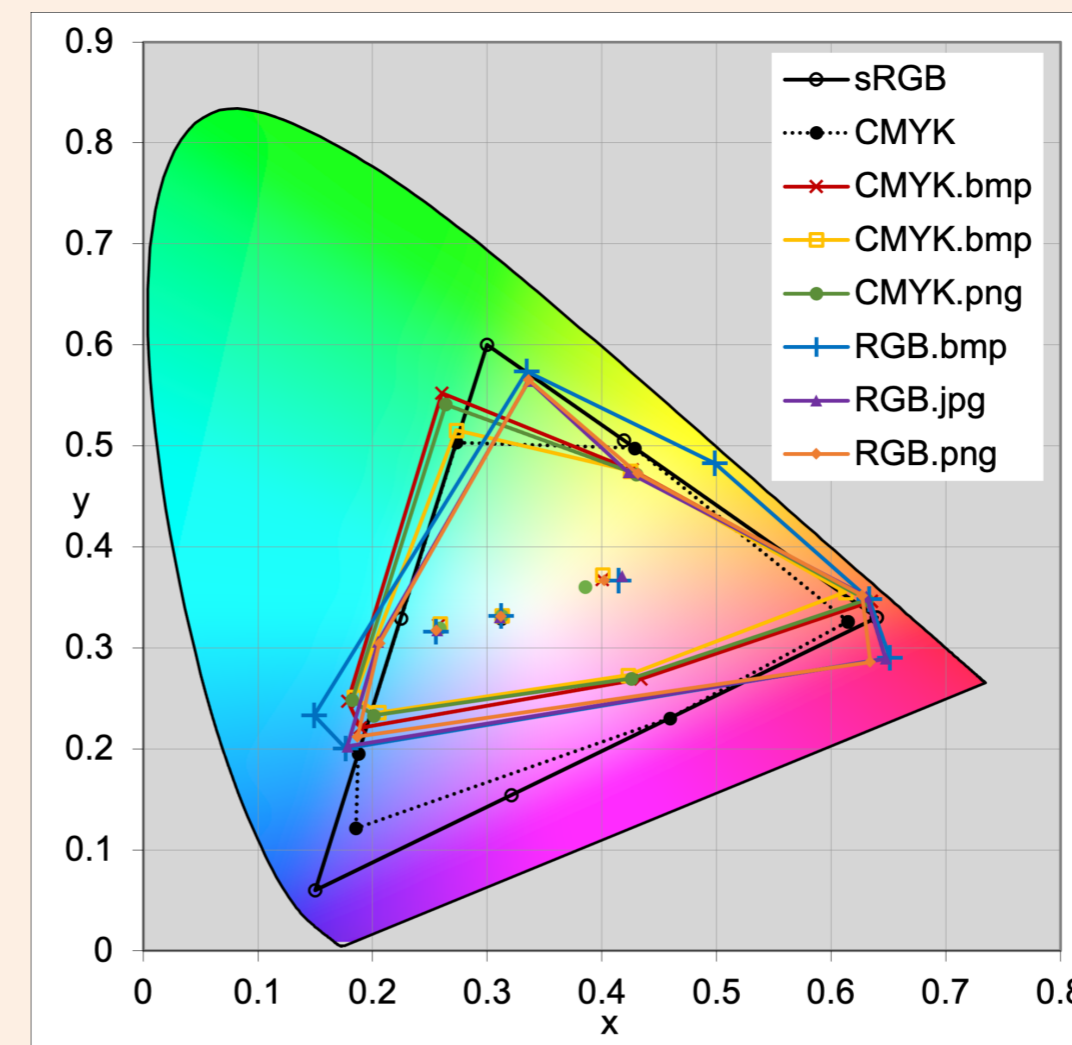
This work focused on the process of formatting the image texture to the color profile before printing (red circle) in the color reproduction workflow for inkjet FDM 3D printers.

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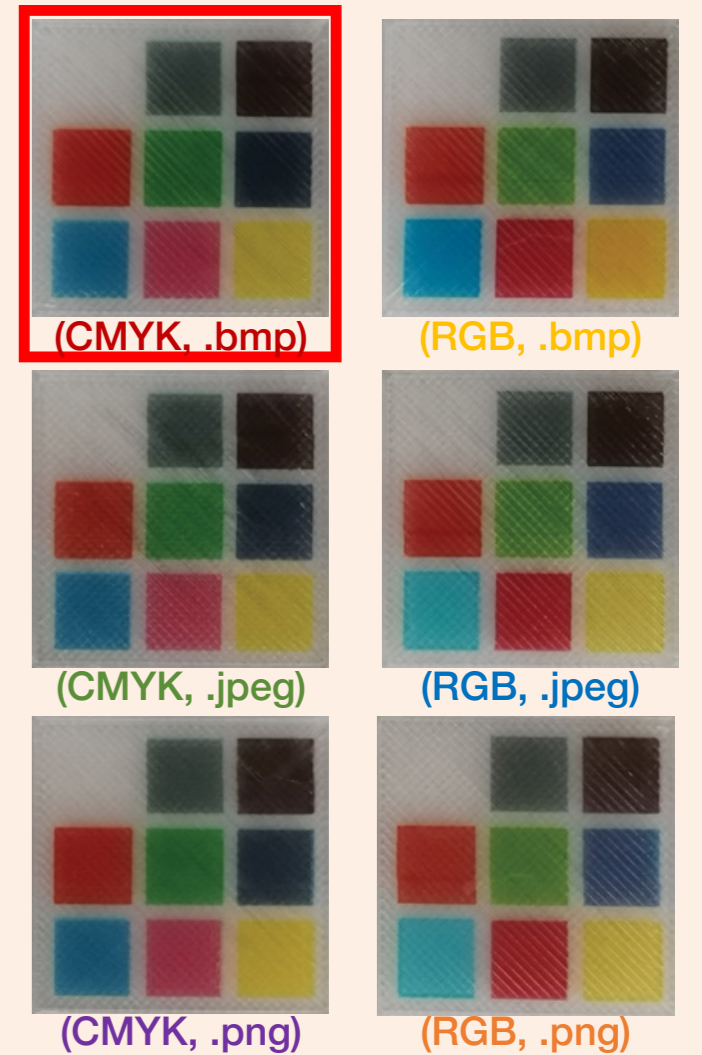
## Color workflow



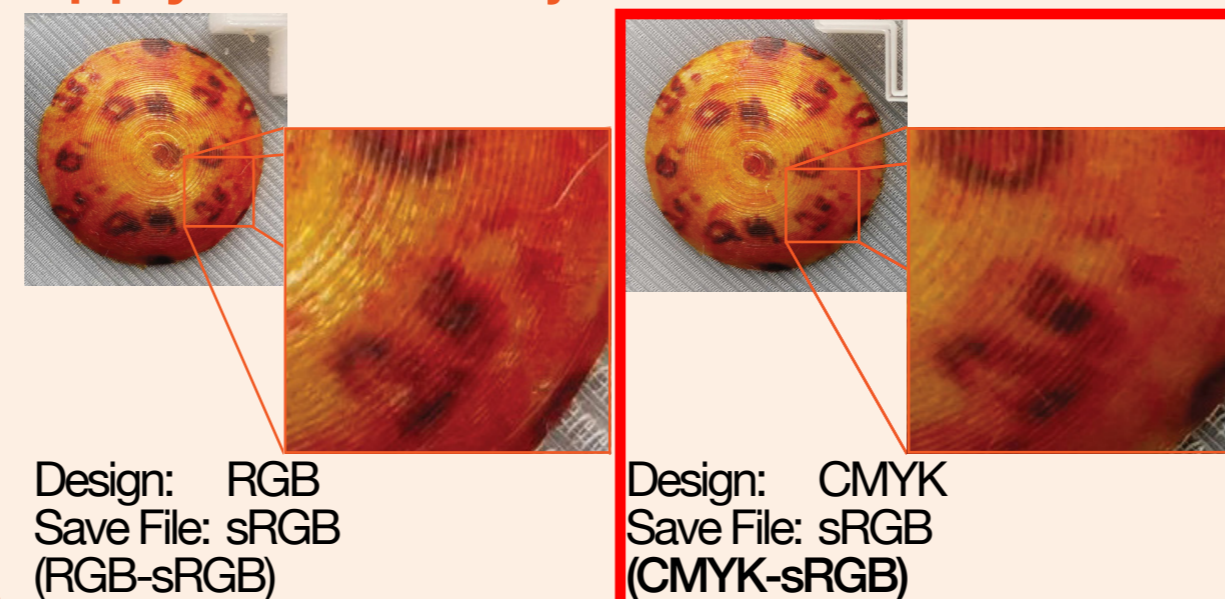
## File format workflow



## Experimental results



## Apply with 3D object



Our results suggest that solving the problem *requires initiating a workflow* that allows for minimizing errors in color reproduction, such as *using the CMYK color profile*. We also found that the mismatched color reproduction depends on different file formats, and this finding requires future investigation.