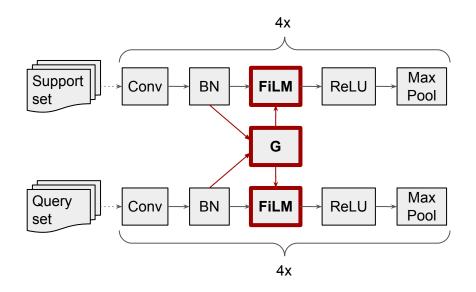
## Cross-Modulation Networks For Few-Shot Learning

Hugo Prol<sup>†</sup>, Vincent Dumoulin<sup>‡</sup>, and Luis Herranz<sup>†</sup>

Key idea: allow support and query examples to interact at each level of abstraction.

## Extending the feature extraction pipeline of Matching Networks:

- $\Leftrightarrow$  Channel-wise affine transformations:  $\operatorname{FiLM}(\mathbf{x}) = (1 + \gamma) \odot \mathbf{x} + \beta$
- $\precsim$  Subnetwork G predicts the affine parameters  $\gamma$  and eta









<sup>&</sup>lt;sup>†</sup> Computer Vision Center, Univ. Autònoma de Barcelona

<sup>‡</sup> Google Brain