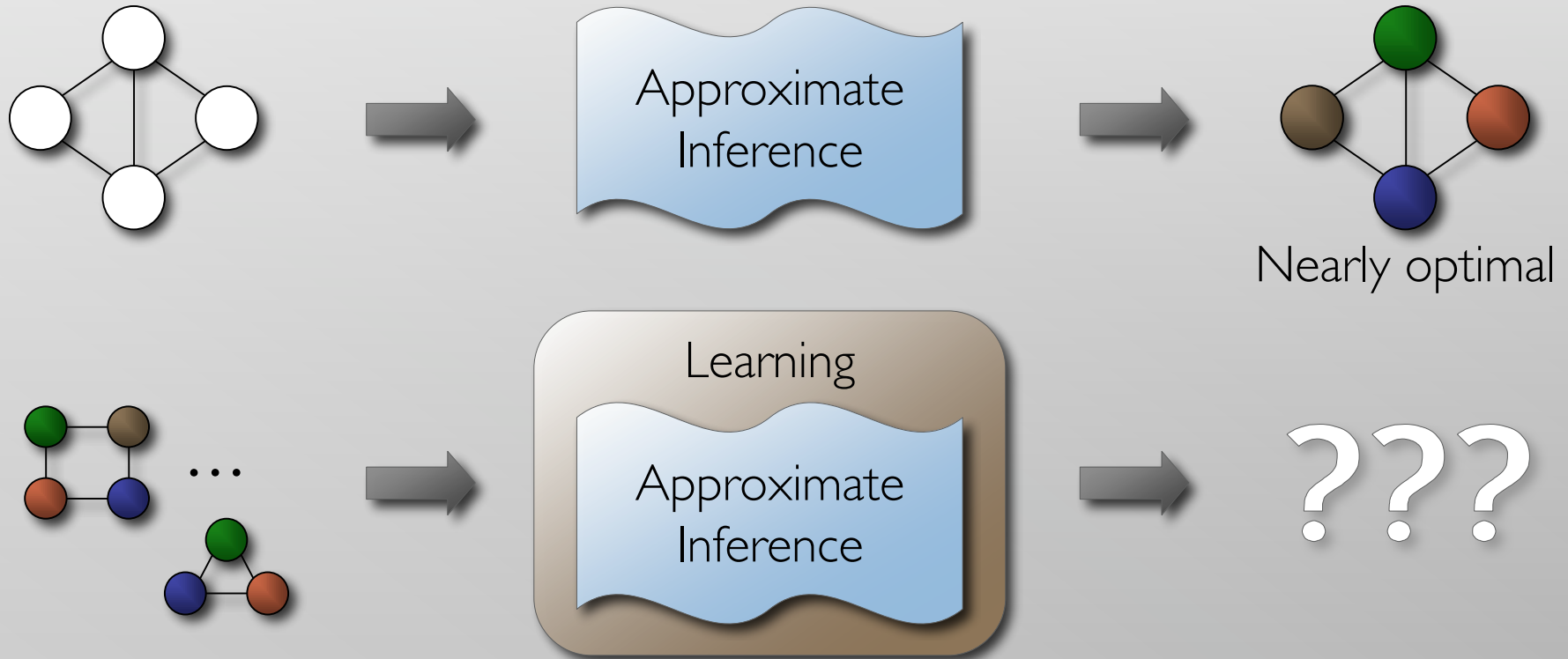


Structured Learning with Approximate Inference

Alex Kulesza and Fernando Pereira, University of Pennsylvania [M43]



- We show that inference approximations (like LPs or loopy BP) can
 - Dramatically increase learning bias
 - Badly mislead standard learning algorithms
- For inference used in learning, **compatibility** is as important as **quality** of approximation