

- ▶ FAY DOWKER, *Modus Ponens in Physics*.
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I will show that the classical “Boolean” rules of inference about physical events are equivalent to three assumptions: (i) something happens, (ii) modus ponens and (iii) if an event doesn’t happen then its complement (or “negation”) does. Physics, specifically quantum mechanics, demands to give up the third assumption and replace it with a “principle of maximal detail”. This implies that rules of inference about the physical world are dynamical.

[1] KATE CLEMENTS, FAY DOWKER, PETROS WALLDEN, *Modus Ponens in Physics*, *arxiv*, arXiv:1201.6266v1