

Some PL Axiom Schemata

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Negation (and *das Absurde*)

- $\varphi \vee \neg\varphi$
- $(\varphi \wedge \neg\varphi) \supset \perp$
- $\varphi \supset \neg\neg\varphi$ / $\neg\neg\varphi \supset \varphi$
- $\perp \supset \varphi$
- $\varphi \supset (\perp \supset \neg\varphi)$ / $\neg\varphi \supset (\perp \supset \varphi)$

Conjunction

- $(\varphi \wedge \psi) \supset \varphi$ / $(\varphi \wedge \psi) \supset \psi$
- $\varphi \supset (\psi \supset (\varphi \wedge \psi))$

Disjunction

- $\varphi \supset (\varphi \vee \psi)$ / $\psi \supset (\varphi \vee \psi)$
- $(\varphi \vee \psi) \supset ((\varphi \supset \chi) \supset ((\psi \supset \chi) \supset \chi))$

Material Conditional

- $\varphi \supset \varphi$
- $(\varphi \supset \psi) \supset (\neg\psi \supset \neg\varphi)$
- $(\varphi \supset \psi) \supset ((\psi \supset \chi) \supset (\varphi \supset \chi))$

Or-to-If

- $(\varphi \supset \psi) \supset (\neg\varphi \vee \psi)$ / $(\neg\varphi \vee \psi) \supset (\varphi \supset \psi)$

Import/Export

- $((\varphi \wedge \psi) \supset \chi) \supset (\varphi \supset (\psi \supset \chi))$ / $(\varphi \supset (\psi \supset \chi)) \supset ((\varphi \wedge \psi) \supset \chi)$

De Morgan's Laws

- $\neg(\varphi \wedge \psi) \supset (\neg\varphi \vee \neg\psi)$ / $(\neg\varphi \vee \neg\psi) \supset \neg(\varphi \wedge \psi)$
- $\neg(\varphi \vee \psi) \supset (\neg\varphi \wedge \neg\psi)$ / $(\neg\varphi \wedge \neg\psi) \supset \neg(\varphi \vee \psi)$