

Remark 3.15. [2DC] It is assumed as an axiom that

$$\neg(\forall x, \phi) \Leftrightarrow (\exists x, \neg\phi) . \quad (3.16)$$

(In Sec. 2.1 in [10] indeed $(\forall x, \phi)$ is presented as short form for $\neg(\exists x, \neg\phi)$).