### Contents

## 1 Interpretation

	N
0 $i$ $1$	$\{i,1\}$ $\{0,1\}$ $\{0,i\}$

$\land$	0	i	1
0 $i$ $1$	$ \begin{cases} \{0\} \\ \{i\} \\ \{i\} \end{cases} $	$ \begin{cases} i \\ i \\ i \end{cases} $	$ \begin{cases} i \\ i \\ 1 \end{cases} $

V	0	i	1
0	{0}	{ <i>i</i> }	{1}
i 1	$ \begin{vmatrix} \{i\} \\ \{1\} \end{vmatrix} $	$\begin{cases} i \\ 1 \end{cases}$	{1} {1}

$$\begin{array}{c|c}
 & \neg \\
 & 0 & \{1\} \\
 & i & \{i\} \\
 & 1 & \{0\}
\end{array}$$

# 2 Schemas of $\Sigma_N$

Size: 3

## 3 Schemas of $\Sigma_{and}$

Size: 8
r4
$$\neg((\varphi \land \psi)), \varphi$$

$$\varphi \land \psi$$
r5
$$\neg((\varphi \land \psi)), \psi$$

$$\varphi \land \psi$$
r6
$$\frac{\varphi, \psi}{\varphi \land \psi}$$
r7
$$\neg \varphi, \neg \psi$$

$$\varphi \land \psi, \neg((\varphi \land \psi)), \varphi, \psi$$
r8
$$\neg((\varphi \land \psi))$$

$$\varphi \land \psi, \neg \varphi, \varphi$$
r9
$$\neg((\varphi \land \psi))$$

$$\varphi \land \psi, \neg \psi, \psi$$
r10
$$\frac{\varphi \land \psi}{\varphi}$$
r11
$$\frac{\varphi \land \psi}{\psi}$$

# 4 Schemas of $\Sigma_{neg}$

Size: 3
r12
$$\neg \varphi, \varphi$$
r13
$$\varphi$$

$$\neg \neg \varphi, \neg \varphi$$
r14
$$\neg \neg \varphi$$

$$\neg \varphi, \varphi$$

## 5 Schemas of $\Sigma_{or}$

Size: 6
r15
$$\neg \varphi, \neg \psi$$

$$\neg ((\varphi \lor \psi)), \varphi \lor \psi, \varphi, \psi$$
r16
$$\neg ((\varphi \lor \psi))$$

$$\neg \varphi, \varphi \lor \psi, \varphi$$
r17
$$\neg ((\varphi \lor \psi))$$

$$\neg \psi, \varphi \lor \psi, \psi$$
r18
$$\frac{\varphi}{\varphi \lor \psi}$$
r19
$$\frac{\psi}{\varphi \lor \psi}$$
r20
$$\frac{\varphi \lor \psi}{\varphi, \psi}$$