





CSL PARIS 2001

1-THE ROLE OF NEGATION

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- Renegociate the Holy Trinity.







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- Duality proofs of A vs. proofs of A^{\perp} .
- Compare with : proofs of A vs. models of $\neg A$.













2-PROOFS OF THE ABSURDITY

- ▶ Hilbert : no such proof ~→ consistency.
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► The complement of a « closed » artifact is not closed.



















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Logical time as alternation positive/negative.



5-DESIGNS (CONT^d)

- ▶ Positive rule : a Plus of Tensors $A = \bigoplus_{I \in \mathcal{N}} \bigotimes_{i \in I} A_{Ii}$.
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Stability commutation to reasonable intersections.



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$$\frac{\overbrace{\vdash \boldsymbol{\xi} * I}}{\boldsymbol{\xi} \vdash} \dots \qquad (\boldsymbol{\xi}, \mathcal{N})$$

▶ $\mathfrak{D} \perp \mathfrak{E}$ iff $\mathfrak{D} = \mathfrak{H}$ or \mathfrak{D} starts with $(+1, \xi, \mathbf{I})$, $I \in \mathcal{N}$.

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- ▶ Incarnation $|\mathfrak{D}|_{G}$: smallest $\mathfrak{D}' \subset \mathfrak{D}$ still in G.
- Subtyping as plain inclusion of behaviours. Incarnation contravariant : if $G \subset H$, then $|\mathfrak{D}|_H \subset |\mathfrak{D}|_G$.



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Connection to records...

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- ► A.k.a. disjunction property.



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