Inference at $*$ 1
of proof for Lemma absval_ubound:

1. $i : \mathbb{Z}$
2. $n : \mathbb{N}$
$\vdash (|i| \leq n) \iff (((\text{-}n) \leq i)\ \&\ (i \leq n))$
by InteriorProof ((((Unfold ‘absval‘ 0)
CollapseTHEN (SplitOnConclITE))·)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

1: . . . . .truecase. . . . . NILNIL

3. $0 \leq i$
$\vdash (i \leq n) \iff (((\text{-}n) \leq i)\ \&\ (i \leq n))$

2: . . . . .falsecase. . . . . NILNIL

3. $i < 0$
$\vdash ((\text{-}i) \leq n) \iff (((\text{-}n) \leq i)\ \&\ (i \leq n))$

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