```
ndiff_ndiff_eq_imin  THM

⊢  ∀a,b:ℕ. (a -- (a -- b)) = imin(a;b)
| by UnivCD THEN Unfold ‘ndiff‘ 0 THEN ArithSimp 0
|
1. a : ℕ
2. b : ℕ
⊢  imax(a+-imax(a+-b;0);0) = imin(a;b)
| by (RWH
|      (LemmaC Thm* ∀a,b:ℤ. -imax(a;b) = imin(-a;-b)    {minus_imax})
|      0)
|     THEN
|     (RWN 1 (LemmaC Thm* ∀a,b:ℤ. a+b = b+a    {add_com}) 0)
|
⊢  imax(imin(-(a+-b);-0)+a;0) = imin(a;b)
| by (RWH
|      (LemmaC
|       Thm* ∀a,b,c:ℤ. imin(a;b)+c = imin(a+c;b+c)    {imin_add_r})
|      0)
|     THEN
|     (ArithSimp 0)
|
⊢  imax(imin(b;a);0) = imin(a;b)
| by (RWN 1 (LemmaC Thm* ∀a,b:ℤ. imin(a;b) = imin(b;a)    {imin_com})
|      0)
|     THEN
|     (Unfold ‘imin‘ 0 THEN SplitOnConclITE)
|
|\
| .....truecase .....
| 3. a≤b
| ⊢  imax(a;0) = a  by Unfold ‘imax‘ 0 THEN SplitOnConclITE
|
.\
. .....falsecase .....
. 3. b<a
. ⊢  imax(b;0) = b  by Unfold ‘imax‘ 0 THEN SplitOnConclITE
END
```