```
int_lower_well_founded  THM

⊢  ∀n:ℤ. WellFnd{i}({...n};x,y.x>y)
| by Auto
|    THEN
|    Inst:
|    Thm* ∀n:ℤ. WellFnd{i}({n...};x,y.x<y)    {int_upper_well_founded}
|    Using:[-n]
|
1. n : ℤ
2. WellFnd{i}({-n...};x,y.x<y)
⊢  WellFnd{i}({...n};x,y.x>y)
| by FwdThru:
|    Thm* ∀r:(T→T→Prop), S:Type, f:(S→T).
|         WellFnd{i}(T;x,y.r(x,y)) ⇒ WellFnd{i}(S;x,y.r(f(x),f(y)))
|    {inv_image_ind_a}
|    on [ Hyp:-1 ]
|    Using:[S:= {...n} | f(x):= -x]
|
3. WellFnd{i}({...n};x,y.-x<-y)
⊢  WellFnd{i}({...n};x,y.x>y)
  by Rewrite-1 by ∀x,y:{...n}. -x<-y ⟺ x>y
END
```