Formalización de las matemáticas con Lean. Un caso de estudio: Geometría euclídea plana.

Facultad de Ciencias Matemáticas.
Trabajo dirigido por Jorge Carmona Ruber.

Adrián Lattes Grassi

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Proposición 1

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lemma line_has_external_point
  {Point Line : Type*} [ig : incidence_geometry Point Line] :
  ∀ l : Line, ∃ A : Point, ¬ A ~ l :=
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  specialize h1 l hAl hBl,
  exact h1 hCl
end
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