

The Ghosh Point of a Non-Degenerate Triangle

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Abstract

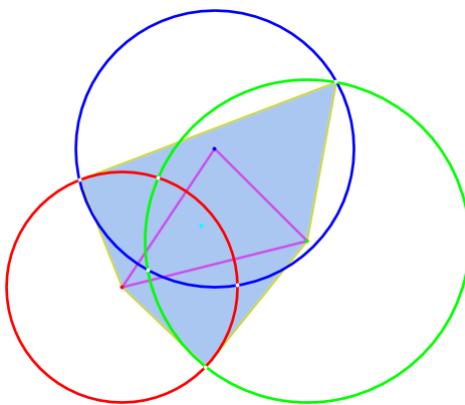
In this paper, I describe the Ghosh point of a triangle.

The paper ends with “The End”

Introduction

In this paper, I describe the Ghosh point of a non-degenerate triangle.

The Ghosh Point of a Non-Degenerate Triangle



The Ghosh Point of a Non-Degenerate Triangle (marked in cyan)

Consider a non-degenerate triangle $ABC \in \mathbb{R}^n$.

Draw the circle centered at A , B and C of radii r_A , r_B and r_C such that
the three circles intersect pair-wise at two points.

Let $\mathbb{V} = \{A, B, C\}$ and

$\mathbb{I}_{\{r_A, r_B, r_C\}} = \{P : P \text{ is a point of pair-wise intersection of circles } A, B \text{ and } C\}$

Let $\mathbb{S} = \mathbb{V} \cup \mathbb{I}_{\{r_A, r_B, r_C\}}$

Then $n(\mathbb{S}) \geq 3$

Let \mathbb{H} be the convex hull of \mathbb{S}

Then the Ghosh point G_{r_A, r_B, r_C} of ABC is given by the centroid of \mathbb{H}

The End