

# FIRST PRIZE

## *Study of the Bloodstains in the Shroud of Turin: Part 1 - Chromatic Analysis*

## *Study of the Bloodstains in the Shroud of Turin: Part 2 - Chromatic Interpretation*

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This work shows the RGB chromatic differences of the bloodstains of the Shroud of Turin according to the chromatic relations which distinguish them, to the histograms of the brightness, to their shapes and their positions; the results obtained consider also the geometry of the body and the position of the sheet. The analysis through G/R and B/R chromatic ratios compare revealed effective: it has provided coherent results and, from the analysis of stains considered not to be blood, the method has revealed their hypothesized nature. The compilation of the compatibility table provided data suitable for the study of the formation dynamic, also by other researchers. Hypotheses about stains formation dynamic have been conducted, from objective analysis results. Six macrocategories have been created: for each one, a formation dynamic has been elaborated. The application of these macrocategories has been possible only in certain zones, where the ratios disposition permitted an easier theory elaboration. In the other zones, the groups compatible with the macrocategories have been evidenced; the reasons why ratios were different from expected ones are also reported.