

## Análisis físico del minuto 120 del partido Chile-Brasil en el Mundial de Fútbol 2014 [

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text (article)

Analítica

This paper presents the analysis, from a Physics point of view, of the last play of overtime in the match between Chile and Brazil, in the World Cup 2014. In this match, the Chilean player Mauricio Pinilla threw the ball into the Brazilian crossbar forcing extra time with penalties. The analysis includes a close study of the movement of the ball and its rebound, determining speeds through the observation of video recordings of the play, and reasonable estimates for the situation. Besides an analysis of the drag force of the air on the ball in the play, getting the estimates of the kinetic energy of the ball before and after the rebound, and then estimating the strength and deformation on the ball. All this analysis was developed with the information and technology available to anyone, so that the results can be replicated in the classroom. For educational activities, it is suggested to use this analysis as a base to work different physics phenomena to make them more significant for the students

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