

## **A MODEL FOR A PROTOTYPE OF HYBRID SOLAR VEHICLE**

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Abstract. A comprehensive model for the dynamic simulation and optimal design of a Hybrid Solar Vehicle with series structure is applied to the analysis a new prototype on development. A comparative study with respect to the conventional vehicle in urban driving is performed, considering different vehicle structures and sizing. The potential benefits in terms of fuel savings and the corresponding variations in weight and costs are presented and discussed.

Keywords: Hybrid Solar Vehicles, Model, Optimal Design, Control