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Nonimaging Optics: Efficient Design for Illumination and Solar Concentration VII

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Introduction

Those familiar with this conference recognize the pivotal role of thermodynamics in the development of Nonimaging Optics. Recent discoveries in science suggest that thermodynamics may even be pivotal in understanding Newton's laws of motion and even gravity. Erik Verlinde, (Institute for Theoretical Physics, University of Amsterdam) has shown that gravity is explained as an entropic force caused by changes in the information associated with the positions of material bodies. It is encouraging that our subject has been at the forefront of taking its guidance from thermodynamics. Indeed, 2010 may become known as the year of thermodynamics!

In 2009 we wrote that there was renewed respect for the power of thermodynamics to illuminate optical design and performance. And finally, the recognition of Nonimaging Optics with the A. E. Conrady Award is evidence that the field is growing up. Entirely similar remarks apply this year, since once again, Nonimaging Optics has been recognized by the Conrady Award of SPIE.

Roland Winston Jeffrey M. Gordon