Physics and the Art of Dance: Understanding Movement

Kenneth Laws
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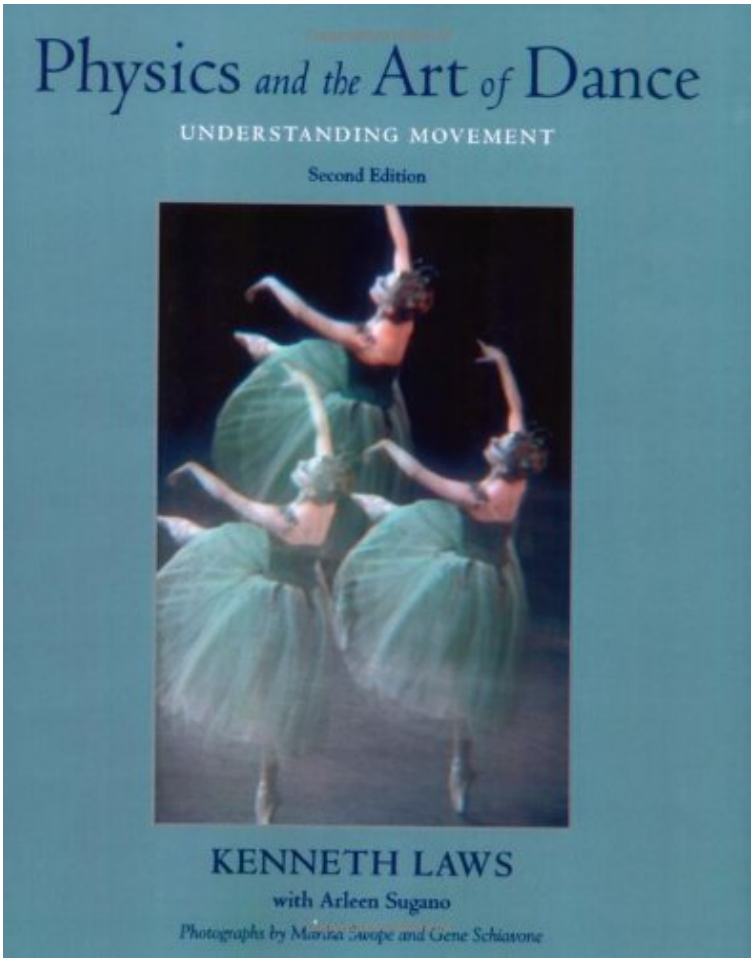

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Kenneth Laws : Physics and the Art of Dance: Understanding Movement before purchasing it in order to gage whether or not it would be worth my time, and all praised Physics and the Art of Dance: Understanding Movement:

0 of 0 people found the following review helpful. Love it!By Miss Z from DCA must for physicians, physical therapists, and dance medicine scientists!0 of 0 people found the following review helpful. Five StarsBy CustomerExcellent resource. Very informative and helpful for both the budding physicist and aspiring ballerina.0 of 0 people found the following review helpful. beautifully doneBy Michael LisaAs a physics professor and one who discusses sports, I find Laws book beautifully written, very well thought out, and beautifully illustrated. It is a fun read and informative.

Physics and the Art of Dance gives all who enjoy dance - whether as dancers, students, teachers, or fans - an opportunity to understand what happens when human bodies move in the remarkable ways we call dance. How, for instance, do dancers create the illusion of defying gravity? Or of starting to spin when in the air with no source of

force to act on their bodies? You may observe some dancers using their arms in a way that allows some to jump higher than others. What is that technique, and why does it work? In this second edition, author Ken Laws - a physicist with years of professional dance training - teams with veteran dance instructor Arleen Sugano to provide new step-by-step experiments for dancers. "What you see" sections describe the way physical principles form the framework within which some movements exist. The complementary "What you do" sections allow dancers to experience how those physical analyses can provide them a more efficient means of learning how to carry out those movements. Throughout, the book shows how movements are first artistic expressions, and secondly movements of the body within the framework of easy-to-understand physical principles. Dancers and dance instructors will find in this book an efficient means of improving technical proficiency and growing professional and aesthetic development. For physics and science teachers, the book provides a new and compelling way to draw people into the world of science. And observers and fans of dance will marvel over the beautiful time-stop photography by renowned dance photographers Martha Swope and Gene Schiavone.

"[L]ucid, friendly, and to the point. Laws obviously knows his ballet as well as his physics...This book will surely have immense value to dancers...[F]ascinating to see physical principles applied in such practical detail to positioning the human body in the beautiful and abstract movement of the ballet."--Physics Today"[T]his volume provides clear explanations of the physical laws that describe the way nature controls balance, leaps, pirouettes, lifts, and turns; the effect of body size on ballet technique; and the relationship between the science and dance...Excellent photographs and diagrams illustrate the text. Providing a new understanding of the application of physics to ballet that results in better and safer performances, this valuable resource is accessible to students and general readers as well as dance scholars, faculty, and professional dancers."--Choice"Physics and the Art of Dance should be read by all dancers, choreographers and dance teachers. Dance artists and dance scientists will delight in the new information. The puzzlers at the beginning of each chapter motivate the reader to find logical answers. Photographs by Martha Swope are elegant; the tables and glossary are excellent. This book will be required reading for all my students."--Janice Plastino, University of California at Irvine"Ken Laws seems to me to be an important ambassador coming to dance from the world of science. He is our interpreter and all his explanations of the physical laws are informed by, and infused with, his great love of dance and dancers." --Francia Russell, Pacific Northwest Ballet"Which came first, gravity, human rhythmic movement, Newton's laws of motion, classical ballet, an understanding of the physics of dance, or an appreciation of the aesthetics of ballet? Which one? And does it matter? Ken Laws in this most remarkable book juxtaposes all the concepts above resulting in a clarification, enhancement and appreciation of the beauty of both ballet and physics. Laws make use of first-rates photographs and illustrations to illuminate and inform the reader resulting in a superior enjoyment of both ballet and physics."--Brian Schwartz, Professor of Physics and Vice President for Research and Sponsored Programs, The Graduate Center, City University of New York"Laws' book is fascinating to read and one of the finest examples of the marriage of science and art in the literature today."--Gigi Berardi, author of Finding Balance"Explains your steps in scientific terms...The practical lessons will surely help you out in ballet, and science class, too."--Dance Spirit MagazineAbout the AuthorKenneth Laws is Professor Emeritus of Physics, Dickinson College, and author of The Physics of Dance (Schirmer, 1984), Physics, Dance, and the Pas de Deux (Schirmer, 1994), and Physics and the Art of Dance: Understanding Movement (OUP, 2002) Arleen Sugano is Independent Dance Instructor, former instructor of Dance, New York University, University of North Texas, Joffrey Ballet School, Rod Rodgers Dance Company, and Lula Washington Dance Company, amongst many others.