

The book was found

Higgs Discovery: The Power Of Empty Space (Kindle Single)



Synopsis

On July 4, 2012, physicists at the Large Hadron Collider in Geneva made history when they discovered an entirely new type of subatomic particle that many scientists believe is the Higgs boson. For forty years, physicists searched for this capstone to the Standard Model of particle physics—the theory that describes both the most elementary components that are known in matter and the forces through which they interact. This particle points to the Higgs field, which provides the key to understanding why elementary particles have mass. In *Higgs Discovery*, Lisa Randall explains the science behind this monumental discovery, its exhilarating implications, and the power of empty space.

Book Information

File Size: 738 KB

Print Length: 114 pages

Page Numbers Source ISBN: 0062300474

Publisher: Ecco (July 24, 2012)

Publication Date: July 24, 2012

Sold by: Digital Services LLC

Language: English

ASIN: B008LUYZFM

Text-to-Speech: Enabled

X-Ray: Enabled

Word Wise: Enabled

Lending: Not Enabled

Enhanced Typesetting: Enabled

Best Sellers Rank: #199,378 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #11

in Kindle Store > Kindle eBooks > Nonfiction > Science > Physics > Molecular Physics #16

in Kindle Store > Kindle Singles > The Sciences #22 in Books > Science & Math > Physics >

Nuclear Physics > Atomic & Nuclear Physics

Customer Reviews

Higgs Discovery: The Power of Empty Space by Lisa Randall "Higgs Discovery" this timely and topical Kindle Single, is written to enlighten the public to what the discovery of the Higgs boson means and to explain where it will take us. Influential and highly acclaimed theoretical physicist and best-selling author of "Knocking on Heaven's Door", Lisa Randall, gives the reader an intellectual

appetizer on the implications of the announcement that a key particle, the Higgs boson was discovered. Randall's expertise and ability to convey such a complex topic to the layperson is what makes this Kindle Single such a great value. This 83-page book is composed of three sections: Higgs Discovery: The Power of Empty Space, An Excerpt from Warped Passages and An Excerpt from Knocking on Heaven's Door. Positives: 1. A timely and fascinating topic, written at an accessible level for the layperson and everyone in between. 2. Randall's expertise in the field and background as an educator provides the perfect mix to reach out and educate the public. 3. A great Kindle Single value. A great idea that is now benefitting authors and readers alike. In merely 83 pages, the author provides much needed information on what has become a pop-scientific topic. 4. What the Higgs boson is. Finally, I get it, I think. 5. The implications of the discovery. 6. As a true scientist and educator, Randall keeps the discovery in perspective. That is, in science everything is a matter of degrees of certainty. 7. Not to be confused with the Higgs boson but also insight into what the Higgs mechanism is and its implications. 8. Understanding what empty space really is. 9. The Large Hadron Collider (LHC)...what makes it a remarkable machine and its future use.

Randal's book consists of 3 chapters. The first chapter details Randall's reaction to the discovery of the Higgs boson, as well as some general information about the particle and what it implies about the physical laws of the universe, and the future direction of this understanding now that the discovery has been made. The two remaining chapters are taken from Randall's previous books, and are meant to provide additional context around the Higgs boson and what it entails, as well as why scientists were expecting to find it. Beginning with the basics, we learn that the Higgs boson is an elementary particle--a fundamental constituent of matter out of which all things are made (there are 3 types of elementary particles: quarks, leptons and bosons, and the Higgs is a variety of boson). The Higgs particle was created by way of smashing protons together at very high speeds in the LHC. The reason it took so long to identify the Higgs is because many elementary particles are produced when protons are smashed together (and the Higgs is produced only very rarely in these collisions), and differentiating between the various particles requires analyzing the results over numerous trials (to ensure that random noise is not adulterating the data). The discovery of the new fundamental particle was significant in its own right, of course, but the real reason why finding the Higgs was so important is because the particle has peculiar qualities that implies the existence of a charged field that pervades space. This field is known as the Higgs field, and in order to see why it is so important we will have to make a brief detour into the Standard Model of particle physics.

[Download to continue reading...](#)

Higgs Discovery: The Power of Empty Space (Kindle Single) Kindle Unlimited: 7 Tips to Maximizing Kindle Unlimited Subscription Account Benefits and Getting the Most from Your Kindle Unlimited Books (Kindle Unlimited, ... books, kindle unlimited subscription) Cancel Kindle Unlimited: How To Cancel Kindle Unlimited Subscription in Two Minutes! (With Screenshots): Cancel Kindle Unlimited Subscription, Unsubscribe from Kindle Unlimited, Cancel Kindle Single Mom: The Ultimate Guide to Single Parenting: How to Be Successful at Single Parenting and Raise your Kids Easily (Single Mom Books) How To Sell Romance Novels On Kindle. Marketing Your Ebook In 's Ecosystem: A Guide For Kindle Publishing Authors. (How To Sell Fiction On Kindle. ... A Guide For Kindle Publishing Authors. 3) PARENTING: Single Parenting For Moms: A Guide in Raising Your Family and Being a Successful Mom (Parenting, Single Parent, Single Mother, Parenting Boys, Parenting Girls, Raising kids, Healthy child) Parenting For Single Mothers: Being A Good Mom And Raising Great Kids (Single Parent, Single Mom, Parenting Boys, Parenting Girls) Parenting: SINGLE PARENTS' BOOK: HOW TO BE THE BEST MOM AND DAD AT THE SAME TIME! 11 RULES ON HOW TO RAISE GREAT KIDS ALONE (Single, Parenting, Parenting Toddlers, Single Parenting) The Single Parent Dating Solution: A Guide Through Roadblocks In Dating And Romance While Single Parenting (Single Parenting For Mothers, Dating Advice For Women) Lunar Discovery: Let the Space Race Begin (Discovery Series Book 1) Gloria Steinem: The Kindle Singles Interview (Kindle Single) Kindle - das inoffizielle Handbuch zu Kindle Paperwhite, Kindle & Co. Anleitung, Tipps und Tricks. (German Edition) Using Kindle: A Complete Guide to 's Revolutionary Wireless Reading Devices (Kindle DX, Kindle 2) Kindle Unlimited: 17 Ways to Maximize Your Kindle Unlimited Subscription: Tips and tricks to get the most from your monthly Kindle Unlimited subscription Kindle Unlimited: How to Return a Borrowed Kindle Book (kindle unlimited, lending library) Kindle Owners Lending Library: Get Free Books, Movies and TV Shows with your Kindle and Prime Membership (Kindle Owners Lending Library & Prime) Power Training: For Combat, MMA, Boxing, Wrestling, Martial Arts, and Self-Defense: How to Develop Knockout Punching Power, Kicking Power, Grappling Power, and Ground Fighting Power Short Stories from Hogwarts of Power, Politics and Pesky Poltergeists (Kindle Single) (Pottermore Presents) Most Wanted Particle: The Inside Story of the Hunt for the Higgs, the Heart of the Future of Physics Present at the Creation: Discovering the Higgs Boson

[Dmca](#)