



Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics)

Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau

Download now

[Click here](#) if your download doesn't start automatically

Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics)

Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau

Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau

This second edition is fully updated, covering in particular new types of coherent states (the so-called Gazeau-Klauder coherent states, nonlinear coherent states, squeezed states, as used now routinely in quantum optics) and various generalizations of wavelets (wavelets on manifolds, curvelets, shearlets, etc.). In addition, it contains a new chapter on coherent state quantization and the related probabilistic aspects. As a survey of the theory of coherent states, wavelets, and some of their generalizations, it emphasizes mathematical principles, subsuming the theories of both wavelets and coherent states into a single analytic structure. The approach allows the user to take a classical-like view of quantum states in physics.

Starting from the standard theory of coherent states over Lie groups, the authors generalize the formalism by associating coherent states to group representations that are square integrable over a homogeneous space; a further step allows one to dispense with the group context altogether. In this context, wavelets can be generated from coherent states of the affine group of the real line, and higher-dimensional wavelets arise from coherent states of other groups. The unified background makes transparent an entire range of properties of wavelets and coherent states. Many concrete examples, such as coherent states from semisimple Lie groups, Gazeau-Klauder coherent states, coherent states for the relativity groups, and several kinds of wavelets, are discussed in detail. The book concludes with a palette of potential applications, from the quantum physically oriented, like the quantum-classical transition or the construction of adequate states in quantum information, to the most innovative techniques to be used in data processing.

Intended as an introduction to current research for graduate students and others entering the field, the mathematical discussion is self-contained. With its extensive references to the research literature, the first edition of the book is already a proven compendium for physicists and mathematicians active in the field, and with full coverage of the latest theory and results the revised second edition is even more valuable.

 [Download Coherent States, Wavelets, and Their Generalizatio ...pdf](#)

 [Read Online Coherent States, Wavelets, and Their Generalizat ...pdf](#)

Download and Read Free Online Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau

From reader reviews:

Laura Mason:

Reading a guide can be one of a lot of task that everyone in the world really likes. Do you like reading book consequently. There are a lot of reasons why people enjoy it. First reading a publication will give you a lot of new information. When you read a guide you will get new information simply because book is one of various ways to share the information or even their idea. Second, reading through a book will make you more imaginative. When you reading a book especially tale fantasy book the author will bring you to imagine the story how the characters do it anything. Third, you may share your knowledge to other folks. When you read this Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics), you may tells your family, friends as well as soon about yours book. Your knowledge can inspire different ones, make them reading a book.

Susan Scott:

Spent a free a chance to be fun activity to perform! A lot of people spent their sparetime with their family, or their very own friends. Usually they performing activity like watching television, about to beach, or picnic inside park. They actually doing same every week. Do you feel it? Do you need to something different to fill your own personal free time/ holiday? Might be reading a book might be option to fill your totally free time/ holiday. The first thing you ask may be what kinds of reserve that you should read. If you want to test look for book, may be the guide untitled Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) can be fine book to read. May be it can be best activity to you.

Della Francis:

People live in this new day time of lifestyle always try and and must have the extra time or they will get lots of stress from both daily life and work. So , when we ask do people have extra time, we will say absolutely yes. People is human not really a robot. Then we request again, what kind of activity have you got when the spare time coming to you of course your answer will unlimited right. Then do you ever try this one, reading ebooks. It can be your alternative inside spending your spare time, the actual book you have read is actually Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics).

Richard Lawrence:

A number of people said that they feel bored when they reading a guide. They are directly felt the idea when they get a half elements of the book. You can choose the particular book Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) to make your personal reading is interesting. Your personal skill of reading ability is developing when you like reading. Try to choose easy book to make you enjoy you just read it and mingle the impression about book and studying especially. It is to be initial opinion for you to like to available a book and read it. Beside that the reserve Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) can to be your brand-new friend when you're

really feel alone and confuse with what must you're doing of this time.

Download and Read Online Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau #XJBK90H8A5E

Read Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) by Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau for online ebook

Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) by Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) by Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau books to read online.

Online Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) by Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau ebook PDF download

Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) by Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau Doc

Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) by Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau Mobipocket

Coherent States, Wavelets, and Their Generalizations (Theoretical and Mathematical Physics) by Syed Twareque Ali, Jean-Pierre ANTOINE, JP Gazeau EPub