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application for studyi ngboundary-value problems for elliptic and parabolic With partialdifferential equations and for systems of firstorderer Equations partialdifferential n equations. To keep the presentation concise and accessible, Jean-

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provided. Applied Functional Analysis, Second Edition is an excellent and timely resource forboth pure and applied mathematicians. This volume takes up various topics in Mathematical Analysis including boundary and initial value problems for Page 20/190

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most promising mathematical developments in harmonic analysis in the last decade brought about by the interplay among different areas of abstract and applied mathematics This intertwining of ideas is considered starting from the theory of unitary group Page 38/190

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theory and how it can be combined with the shearlet transform to establish shearlet coorbit spaces Microlocal properties of the shearlet transform and its ability to provide a precise geometric characterization of edges and interface boundaries in images and other Page 41/190

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chapters to ensure consistency of the mathematical material presented. Harmonic and Applied Analysis: From Groups to Signals is aimed at graduate students and researchers in the areas of harmonic analysis and applied mathematics, as well as at other applied scientists interested in Page 43/190

representations of multidimensional data. It can also be used as a textbook for graduate courses in applied harmonic analysis. There are several subjects in analysis that are frequently used in applied mathematics. theoretical physics and engineering
Page 44/190

sciences, such as complex variable, ordinary differential equations, special th functions, asymptotic methods, integral transforms and distribution theory. However, for graduate students or upperlevel undergraduate students who are not going to specialize in these areas, there is Page 45/190

no need for them study these subjects in great depth. Instead, it would/\(\)ith probably be more beneficial for them to have an introduction to these topics so that when the need arises. they know what approach to take. With this in mind, this set of lecture notes has been written for a Page 46/190

ne-semester course. Sufficient details have also been included to make it sufficiently the adaptable for selfstudy. There are in total six chapters with each covering only a few topics quations Furthermore, the on chapters are all selfcontained. The prerequisites for the readers of this book Page 47/190

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