## <<索伯列夫空间和插值空间导论>>

#### 图书基本信息

书名: <<索伯列夫空间和插值空间导论>>

13位ISBN编号: 9787510050435

10位ISBN编号:751005043X

出版时间:2013-1

出版时间:世界图书出版公司

作者: 塔塔

版权说明:本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:http://www.tushu007.com

# <<索伯列夫空间和插值空间导论>>

#### 内容概要

《索伯列夫空间和插值空间导论(英文)》是以作者研究生教程的讲义为蓝本整理扩充而成,全面讲述了索伯列夫空间和插值理论。

书中包括42章,每章尽可能多的包括研究生学习所需的材料,不仅是一部研究生学习的讲义材料,也 是很多老师学者关心的课题。

# <<索伯列夫空间和插值空间导论>>

### 作者简介

作者: (美国) 塔塔(Luc Tartar)

## <<索伯列夫空间和插值空间导论>>

#### 书籍目录

1 historical background 2 the lebesgue measure, convolution 3 smoothing by convolution 4 truncation; radon measures; distributions 5 sobolev spaces; multiplication by smooth functions 6 density of tensor products; consequences 7 extending the notion of support 8 sobolev's embedding theorem, i 10 poincare's inequality 11 the equivalence lemma; compact embeddings 12 embedding theorem, n р regularity of the boundary; consequences 13 traces on the boundary 14 green's formula 15 the fourier transform 16 traces of hs(rn) 17 proving that a point is too small 18 compact embeddings 19 lax-milgram lemma 20 the space ) 21 background on interpolation; the complex method 22 real interpolation; k-method 23 interpolation of I2 spaces with weights 24 real interpolation; j-method 25 interpolation inequalities, the spaces , 1 26 the lions-peetre reiteration theorem 27 maximal functions 28 bilinear and nonlinear interpolation 29 obtaining lp by interpolation, with the exact norm 30 my approach to sobolev 's embedding theorem 31 my generalization of sobolev 's embedding theorem 32 sobolev 's embedding theorem for besov spaces 33 the lions-magenes space h1/200( ) 34 defining sobolev spaces and besov spaces for 35 characterization of ws , p(rn) 36 characterization of ws , p 37 variants with by spaces 38 replacing by by interpolation spaces 39 shocks for quasi-linear hyperbolic systems 40 interpolation spaces as trace spaces 41 duality and compactness for interpolation spaces 42 miscellaneous questions 43 biographical information 44 abbreviations and mathematical notation references index

## <<索伯列夫空间和插值空间导论>>

#### 章节摘录

插图: Solving nonlinear partial differential equations sometimes requires a carefuluse of adapted functional spaces, and knowing the theory of interpolationspaces is helpful for creating a large family of such spaces, some of them guiteuseful. Many of ttle nonlinear partial differential equations which are studied have their origin in continuum mechanics or physics, but very few mathematicianstake time to try to understand what the right equations and the right questions should I)e, and many work for years on distorted equations without knowingit; there are unfortunately many who know the defects of the models that they use but prefer to hide them in order to pretend that they are working on someuseful realistic problem. It is wiser to be aware of tile defects of the models, but it happens that very honest mathematicians are unaware of some practical limitations of the equations that they study, and when Jean LERAY told methat he did not want the Germans to know that he had worked on questions offluid dynamics, 1 and that he had said that he was a topologist, I first thought that it was for fear that his results on the Navier-Stokes equation could be used by the enemy, which would have been very naive, as they were much tootheoretical to be of any practical use, but more likely he had meant that hedid not want to be forced to work on practical problems in fluid dynamics. Many do not seem to realize that the equations that mathematicians workwith under the name of the Navier-Stokes equation are oversimplified andtherefore not so realistic, but the motivation of a mathematician for working In 1984, I had mentioned the political difficulties that I was encountering in the French university system, and Jean LERAY had explained to me the origin of the political difficulties that he had encountered himself almost forty years earlier. As an officer in the French army, he had been taken prisoner and he had spentmost of World War II in a German camp, while a famous member of the Bourbakigroup had dodged the draft; inside the camp, he had continued to do research, andhe had even organized a university, of which he was the chancellor. He workedon topology, and soon after introduced the basic ideas for sheaf theory, whichanother member of the Bourbaki group plagiarized afterward.

# <<索伯列夫空间和插值空间导论>>

### 编辑推荐

《索伯列夫空间和插值空间导论(英文)》通过大量的脚注讲述了本教程的形成过程有关老师的趣闻轶事,这使《索伯列夫空间和插值空间导论(英文)》不仅是一本很完善的教程,而且也非常适用于相关专业的科研人员。

# <<索伯列夫空间和插值空间导论>>

### 版权说明

本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:http://www.tushu007.com