

## Short Vita

Revised: Dec. 14, 2023.

### **Philip Korman, Professor of Mathematics**

Birth date: September 19, 1951.

Birthplace: Odesa, Ukraine (formerly Odessa, USSR).

### **EDUCATION**

University of Odessa, 1967-1972. Received Diploma.

Ph. D. Courant Institute, NYU, 1981.

### **EXPERIENCE**

Lecturer, Stevens Institute of Technology, Hoboken, N.J., 1980-1981.

Instructor, Ohio State University, Columbus, Ohio, 1981-1983.

Assistant Professor, University of Cincinnati, Ohio 1983-1989.

Associate Professor, University of Cincinnati, 1989-1994.

Professor, University of Cincinnati, 1994.

### **BOOK: LECTURES ON LINEAR ALGEBRA and its APPLICATIONS**

In the series De Gruyter Textbook, Walter de Gruyter, Oct 24, 2023 -  
Mathematics - 258 pages. ISBN: 9783111085401.

Chapters 1-5 provide a textbook for the course "Linear Algebra" for sophomores in mathematics, physics, engineering, economics, and so on. Chapter 6 has in depth presentation of systems of differential equations. Chapter 7 has applications to Mathematical Analysis and Differential Geometry. An extensive solution manual was written by the author. The book has many interesting exercises, and detailed hints are given. This book is well suited for self-study, or for a refresher course, as well as a regular textbook.

Publisher's Description.

The present book is based on the extensive lecture notes of the author and contains a concise course on Linear Algebra. The sections begin with an intuitive presentation, aimed at the beginners, and then often include rather non-trivial topics and exercises. This makes the book suitable for introductory as well as advanced courses on Linear Algebra. The first part of the book deals with the general idea of systems of linear equations, matrices and eigenvectors. Linear systems of differential equations are developed carefully and in great detail. The last chapter gives an overview of applications to other areas of Mathematics, like calculus and differential geometry. A large number of exercises with selected solutions make this a valuable textbook for students of the topic as well as lecturers, preparing a course on Linear Algebra.

Clear and concise approach based on the authors extensive lecture notes.

Well suited for introductory and advanced courses on linear algebra.

Contains a large number of exercises with selected solutions.

### **BOOK: LECTURES ON DIFFERENTIAL EQUATIONS**

AMS/MAA Textbooks 54, MAA Press, Providence, RI, 2019. xii+399 pp.  
ISBN: 978-1-4704-5173-8.

Chapters 1-4 provide a textbook for the course “Differential Equations” for sophomores in science and engineering. Chapters 7 and 8 cover the course “Fourier Series and PDE”. Chapters 5 and 6 are suitable for a graduate ODE course. An extensive solution manual, written by the author, is available. The publisher lets university libraries buy E-books, which makes them free to students. Please consider adapting this book.

### **PUBLICATIONS**

Some 130 Refereed Publications on PDE and ODE (including numerical computations and ecological applications). A monograph “Global Solution Curves for Semilinear Elliptic Equations” was published in 2012 by World Scientific.