Peter Olver and his Books PhL 10.1.16

Background

This guy is a math hot-shot now age 62 at U Minn. His father is WJ Olver involved in the NIST handbook who died in 2013. A whole family of math people. Wife is math too.

Peter Olver did Brown then Harvard PhD 1976 from Birkhoff, at U Minn since 1980, or 36 years!
Dept Head since 2008.

His research interests revolve around the applications of symmetry and Lie groups to differential equations, and he has a book out on this topic. He has a CV online.

130 papers in refereed journals, and an additional 46 that appeared in conference proceedings.

author of 5 books, including the
definitive text on applications of Lie groups to differential equations

My Interest Today 10.1.16

I discovered that he has the following notes online but not clickable from his website,

http://www.math.umn.edu/~olver/am_

Parent Directory		-
bvz.pdf	2012-12-11 22:10	478K
c.pdf	2012-12-11 22:07	2.9M
cvz.pdf	2012-12-11 22:01	232K
fa.pdf	2012-12-11 22:08	552K
fs.pdf	2012-12-11 22:09	402K
hw.pdf	2012-12-11 22:08	584K
hwy.pdf	2012-12-11 22:05	1.2M
leq.pdf	2012-12-11 22:07	793K
ne.pdf	2012-12-11 22:03	2.2M
npd.pdf	2012-12-11 22:00	308K
odz.pdf	2012-12-11 22:01	883K
pdz.pdf	2012-12-11 22:04	901K
ref.pdf	2012-12-11 21:59	81K
series.pdf	2012-12-11 21:59	232K
three.pdf	2012-12-11 21:59	288K
two.pdf	2012-12-11 22:00	287K

I downloaded all the files, here is what they are

bvz	Chapter 11: Boundary Value Problems in One Dimension
fs	Chapter 12: Fourier Series
fa	Chapter 13: Fourier Analysis
hw	Chapter 14: Vibration and Diffusion in 1D
leq	Chapter 15: The Planar Laplace Equation
c	Chapter 16: Complex Analysis
hwy	Chapter 17: Dynamics of Planar Media
pdz	Chapter 18: PDE's in 3D space
ne	Chapter 19: Nonlinear systems
odz	Chapter 20: **Nonlinear ODEs**
cvz	Chapter 21: Calculus of Variations
npd	Chapter 22: Nonlinear Partial Differential Equations
ref	References
series	Appendix C: Power Series and Special Functions
three	Appendix B: Vector Calculus in Three Dimensions
two	Appendix A: Vector Calculus in Two Dimensions
odq	Nonlinear ODE's with heading

As if he had a book in progress in 2012, but this book does not exist anywhere online! Instead he has a brand new Sept 2016 test on Introduction to PDE's. This text has some chapters of the same names as above such as:

Ch 3 Fourier Series	Ch 12 above
Ch 7 Fourier Transforms	Ch 13 above similar maybe
Ch 11 Dynamics of Planar Media	Ch 17 above
Ch 12 PDE's in Space	Ch 18 above

My interest in his notes is with **Nonlinear ODE's**, something that comes up in my Lagrange App D. I read some and thought they were good, then decided to locate the book, and then found there is no book, hence this little doc.

Fact: Whatever this book he is working on with these 2012 notes is 1300+ pages long, because each page has a large page number. Very mysterious. He does have his copyright symbol on every page lower right.