Stackel edit log PhL 11.28.11

Am getting ready to put this monster up on the web.

We Removal 11.28.11

1. Intro and summary. DONE.
2. Notation and Cast of Players DONE
3. Initial Processing of the Helmholtz Equation. DONE.
4. Starting from the other end: The Stäckel Matrix Φ and a Formulation of the Problem DONE
5. Recasting Problem B into a new form. DONE

I rewrote a lot here and got rid of Appendix A which really was not warranted at just added confusion. Then appendix B becomes the new appendix A.

6. The non-uniqueness of Stäckel matrix Φ: Equivalence Operations DONE
7. Have done sections (a) and (b) and (c) and (d), all done with 7. DONE
8. Separability in Cylindrical Systems when $h1 \neq \alpha\, h2$

Found a math error here in lines for a(1) and d(2) DONE

9. Separability in Cylindrical Systems when $h2 = \alpha\, h1$ DONE
10. Separability in Rotational Systems DONE
11. Separation of the Schrodinger equation. (a) done, (b) done, (c) done DONE
12. Separation in Ellipsoidal Coordinates a,b,c,d,e,f done. DONE.
13. Stäckel Theory in N dimensions DONE
14. Stäckel Theory in N=2 dimensions DONE

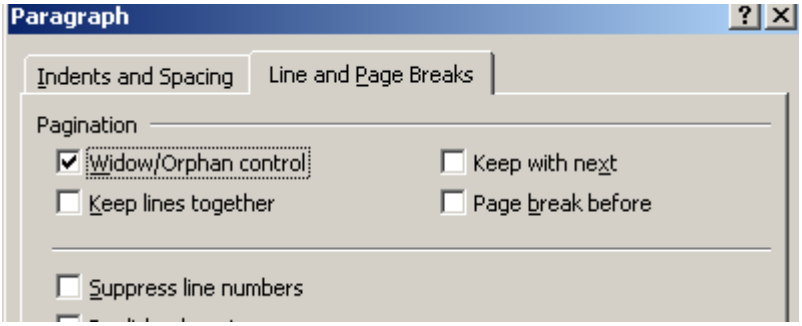
Appendix A. Review of 1D Sturm-Liouville Theory; the Kantorovich-Lebedev transform DONE

title period check DONE
visual spell check DONE.
widow and orphan scan, some page breaks added. DONE.

Nov 30. I went through the final checklist then started Acrobat 8 for PDF. I was expecting about 3 minutes, but after 12 minutes it was only 30% done. I stupidly allowed an "upgrade" of Acro 8 a few days ago and that has caused a problem I suspect. It is doing 1.4 PDF compat, standard settings for Word. I looked at the PDF options, defined "standard(1)" quality by forcing images to max quality. It will probably now take even longer. I will reboot first to see if that helps.

See PDF notes, conversion now takes 50 seconds for Stackel, good. Reverted to Standard settings.

But I am having trouble now with **widows and orphans**, every edit I do shifts things. I thought there was a setting for this, but where is it? It's in Format/Paragraph and there are lots of settings here:



What exactly do these things do?

Pagination

Widow/Orphan control Prevents Microsoft Word from printing the last line of a paragraph by itself at the top of a page (a widow) or the first line of a paragraph by itself at the bottom of a page (an orphan).

Keep lines together Prevents a page break within a paragraph.

Keep with next Prevents a page break between the selected paragraph and the following paragraph.

Page break before Inserts a page break before the selected paragraph.

Suppress line numbers Prevents line numbers from appearing next to selected paragraphs. This option does not affect documents or sections with no line numbers.

The widow orphan has always been on. When I have three equations, they are three different paragraphs, so it cannot control them!

Idea: for LONG sections, I will start on a fresh page.

1
7
12

I need a control key for "insert page break". It is already control-enter.

This does not affect normal view reading at all, but allows me to control things better. It adds pages to the printed document, true. This is really the only way to go and maintain control under edit changes! Now you only affect one section when you edit.

So having done this, I now have to tune the entire document again.

1, 2,3,4,5, 6,7,8,9,10,11,12,13,14,

I just did a 50 second **PDF generation** and the result looks OK pagewise.

Word search works OK. Initial view is as you last had it open. Be careful about that. Want it to open at the contents with entire first page fitting onto the screen. This in PDF xchange.

properties data looks OK.

Bookmarks work and look good! First time I tried them. A mere 1.5 MB for this 91 page pdf! The word doc is 2.5 MB.

On 11.30.11 this PDF was put up on the plucht website. Bookmarks look good.

Feb 19, 2012. I did not like the sans outline font used for big L operator so changed it globally to this.

$\mathsf{L} \rightarrow \mathcal{L}$

See comments in the tensor doc edit log.

Dec 29, 2013. I am doing a read-through due to an email from someone. I will fix tiny errors as they are encountered in the actual doc. I found perhaps 15 typos and added lots of punctuation. There is some problem with updating the TOC. I will try that again after a complete restart of Word. That is OK now. Some of these typos were pretty bad, so worth updating on the site.

* add my ref to Stak errata right by the Stak reference. DONE

Feb 10, 2014.

I edited the first section I guess on Dec 30, 2014 in response to emailer's confusion, I will read that first section right now. Done, did a release on today's date and out it goes.