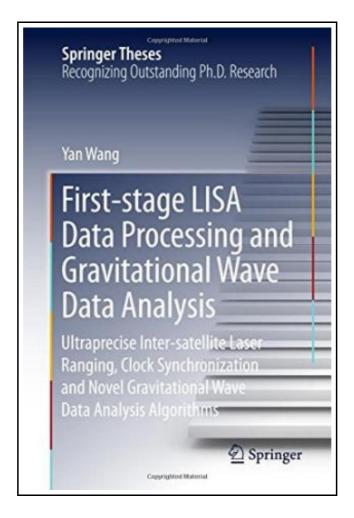
# First-stage LISA data processing and gravitational wave data analysis



Filesize: 4.93 MB

#### Reviews

It is an amazing ebook i actually have at any time study. We have read and so i am certain that i will likely to read through yet again once again later on. Your way of life period will likely be change when you complete looking at this pdf.

(Cristina Rowe)

## FIRST-STAGE LISA DATA PROCESSING AND GRAVITATIONAL WAVE DATA ANALYSIS



Springer-Verlag Gmbh Feb 2016, 2016. Buch. Book Condition: Neu. 241x162x22 mm. Neuware - This thesis covers a diverse set of topics related to space-based gravitational wave detectors such as the Laser Interferometer Space Antenna (LISA). The core of the thesis is devoted to the preprocessing of the interferometric link data for a LISA constellation, specifically developing optimal Kalman filters to reduce arm length noise due to clock noise. The approach is to apply Kalman filters of increasing complexity to make optimal estimates of relevant quantities such as constellation arm length, relative clock drift, and Doppler frequencies based on the available measurement data. Depending on the complexity of the filter and the simulated data, these Kalman filter estimates can provide up to a few orders of magnitude improvement over simpler estimators. While the basic concept of the LISA measurement (Time Delay Interferometry) was worked out some time ago, this work brings a level of rigor to the processing of the constellation-level data products. The thesis concludes with some topics related to the eLISA such as a new class of phenomenological waveforms for extreme mass-ratio inspiral sources (EMRIs, one of the main source for eLISA), an octahedral space-based GW detector that does not require drag-free test masses, and some efficient template-search algorithms for the case of relatively high SNR signals. 228 pp. Englisch.

PDF POF

Read First-stage LISA data processing and gravitational wave data analysis Online Download PDF First-stage LISA data processing and gravitational wave data analysis

#### Other Books



# A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half

Createspace, United States, 2014. Paperback. Book Condition: New. 251 x 178 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. The ultimate learn-by-doing approach Written for beginners, useful for experienced developers who want to...

Save Book »



Baby 411 Clear Answers and Smart Advice for Your Babys First Year by Ari Brown and Denise Fields 2005 Paperback

Book Condition: Brand New. Book Condition: Brand New.

Save Book »



Baby 411 Clear Answers and Smart Advice for Your Babys First Year by Ari Brown and Denise Fields 2009 Paperback

Book Condition: Brand New. Book Condition: Brand New.

Save Book »



## Oxford Reading Tree: Stage 1+: Songbirds: Zak and the Vet

Oxford University Press. Paperback. Book Condition: new. BRAND NEW, Oxford Reading Tree: Stage 1+: Songbirds: Zak and the Vet, Julia Donaldson, Clare Kirtley, Songbirds Phonics combines real phonic stories with interactive whiteboard software to deliver...

Save Book »



#### Oxford Reading Tree: Stage 3: Songbirds: Splash and Squelch

Oxford University Press. Paperback. Book Condition: new. BRAND NEW, Oxford Reading Tree: Stage 3: Songbirds: Splash and Squelch, Julia Donaldson, Clare Kirtley, Songbirds Phonics combines real phonic stories with interactive whiteboard software to deliver the...

Save Book »