



Workshop on Relativistic plasma physics

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(Co- Organizers)



Main topics

- The purpose of the workshop
 - Our research program
 - Who is involved
 - Suggested format of the workshop
 - Feature plans and ideas
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The purpose of the workshop

- On a multi-discipline research area like Relativistic astrophysical plasmas, most of us are at the same time experts and students (Education).
 - So we are all here to learn from each other, but we also expect to interact,
 1. Collaborate and exchange ideas
 2. Constructive criticism and suggestion
 - These are the main reasons for having the workshop
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Our research program

- We have been funded to carry on research on:
 - “The non-linear interaction of Gravitational Waves with plasmas”
 - There is always a good part on writing a research proposal- **MONEY** –
 - It gives you the means to do this kind of meetings –and focus on specific research areas....
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Our research program

We plan to work on three main areas:

1. GW interacting with plasma in the vicinity of their source
 2. GW in the early universe
 3. Plasma instabilities in magnetized and expanding universe (e.g. Jeans instability)
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Who is involved (Thessaloniki)





We interact with....

- Prof. Nikolaos Spyrou
 - Prof Kostas Kokkotas
 - Prof. Simos Ichtiaroglou
 - Prof. Nikos Stergioulas
 - Prof. Harrys Varvoglis
 - Lecturer George Voyatzis
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- Our colleagues have their own research proposals (mainly on nonlinear processes) but they are closely associated with our work
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We currently collaborate (or plan to start soon collaboration) with...

- Prof. Jan Kuijpers (Netherlands)
 - Pprof. Gert Brodin (Sweden)
 - Prof Paul Esposito (USA)
 - Dr. Mattias Marklund (Sweden)
 - Dr Christos Tsagas (UK)
 - Mr Joachim Moorgat (Netherlands)
 - Mr Andreas Kalldberg (Sweden)
 - and we hope to expand these collaborations with more groups in Europe and Greece
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Suggested format for the workshop

- Informal....
 - Please interrupt and ask questions
 - Please give emphasis on the educational character of this meeting
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Feature plans and ideas

- We propose to have another workshop like this in Netherlands or Sweden next year
 - Can we form the core (AUn, KUNijmegen, UUmea) for a potential European Network at the coming years?
 - Maybe in the near future the lecture notes will be on a level to form the basis for text book on this topic.
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Dedication

- Prof. Vassilis Xanthopoulos, (one of the brightest students of this department, student and latter colleague of Chandrashekhar in the U of Chicago), was a dear friend and colleague killed several years ago from a mentally unstable student as he was presenting a seminar on issues related with our workshop.
 - We dedicate this workshop to his memory!
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