

ASTR 6000: Astrophysics Seminar – Gamma-Ray Bursts

<http://jilawww.colorado.edu/~pja/ast6000/>

TIME & PLACE: Thursdays at 4:00pm in E126, except for Thanksgiving week when we will meet on Tuesday instead.

ORGANIZERS: Phil Armitage (pja@jilau1.colorado.edu; office JILA A909; phone 2-7836) and Mitch Begelman (mitch@jila.colorado.edu; office JILA A808; phone 2-7856).

AIMS: The aims of the astrophysics seminar are, first, to provide an informal forum for both students and the organizers to get up to date on recent developments in a forefront area of astronomy (this semester, gamma-ray bursts), and second to practice critical reading and reviewing of scientific papers. Preparing and delivering short presentations is part of the class, but **stimulating a good discussion is more important than giving a polished talk.**

GROUND RULES: For the first two weeks, Phil and Mitch will present some introductory material. After that, we'll discuss one or two papers each week following the schedule listed on the web page. We've tried to pick a mix of both classic papers (though excluding *really* dusty works of mostly historical interest) and recent papers that may be more controversial and / or speculative. All of the papers are available electronically via links from the class web page, though in most cases you'll need to be using a machine with a university IP address to download the full text. Two students will give a **short** presentation and lead the subsequent discussion. We suggest that you aim for a presentation of about 20 minutes, and will cut off the power to any bloated talks that go much beyond that! It should work out that each person will lead the class 2 or 3 times during the semester.

Everyone else needs only to read the papers each week, and come up with one or more insightful questions about them to ask of the presenters, the class, or the organizers (who will probably have no more idea than anyone else). Please email me (Phil) your questions **by Wednesday each week** – I will then post them on the web page. This should mean that (a) the leaders don't have to face difficult questions 'cold', and (b) we can all get an idea of which parts of the paper are most interesting to discuss (or which parts are flat out wrong or utterly incomprehensible, though hopefully those won't apply too often!).

GRADING: This isn't really the point of this class, but since we're required to give grades we'll assign credit based on (a) the quality and quantity of your contributions to the discussion (2/3), and (b) how well your presentation serves as a good introduction to the paper and starting point for discussion (1/3).