

# ReNeW

Research Needs Workshop

# What?

- influence future directions of US fusion research.
- opportunity for the US fusion community to explain its research goals to a new administration.
- help OFES develop a plan for US fusion research during the ITER era---roughly the next two decades.
- ReNeW's planning activity will culminate in a Report to OFES, to appear by mid-July, 2009.

# Structure

- **The plan described in the Workshop report will use as its framework a set of approximately 15 scientific and technical **initiatives**.**
- Initiative: an organized, multi-faceted attack on some question, or coherent set of questions, essential to magnetic fusion energy science and technology, using a combination of new and existing program elements.
- The Report will describe each initiative in sufficient detail to allow an estimate of the required resources.

# Workshop

- A key challenge to ReNeW is the **integration** of the building-block initiatives into a compelling and consistent strategy for fusion energy research.
- Logical and temporal consistency
- **Integration activity to be the dominant focus of the Workshop**, although it must begin well in advance.

# Basis

- Three essential resource documents:
  - Priorities, Gaps and Opportunities Panel, chaired by Martin Greenwald (“Greenwald report”)
  - Toroidal Alternates Panel, chaired by David Hill (“TAP report”)
  - Energy Policy Act (EPAAct) task group of the U.S. Burning Plasma Organization (“EPAAct report”)

# Organization

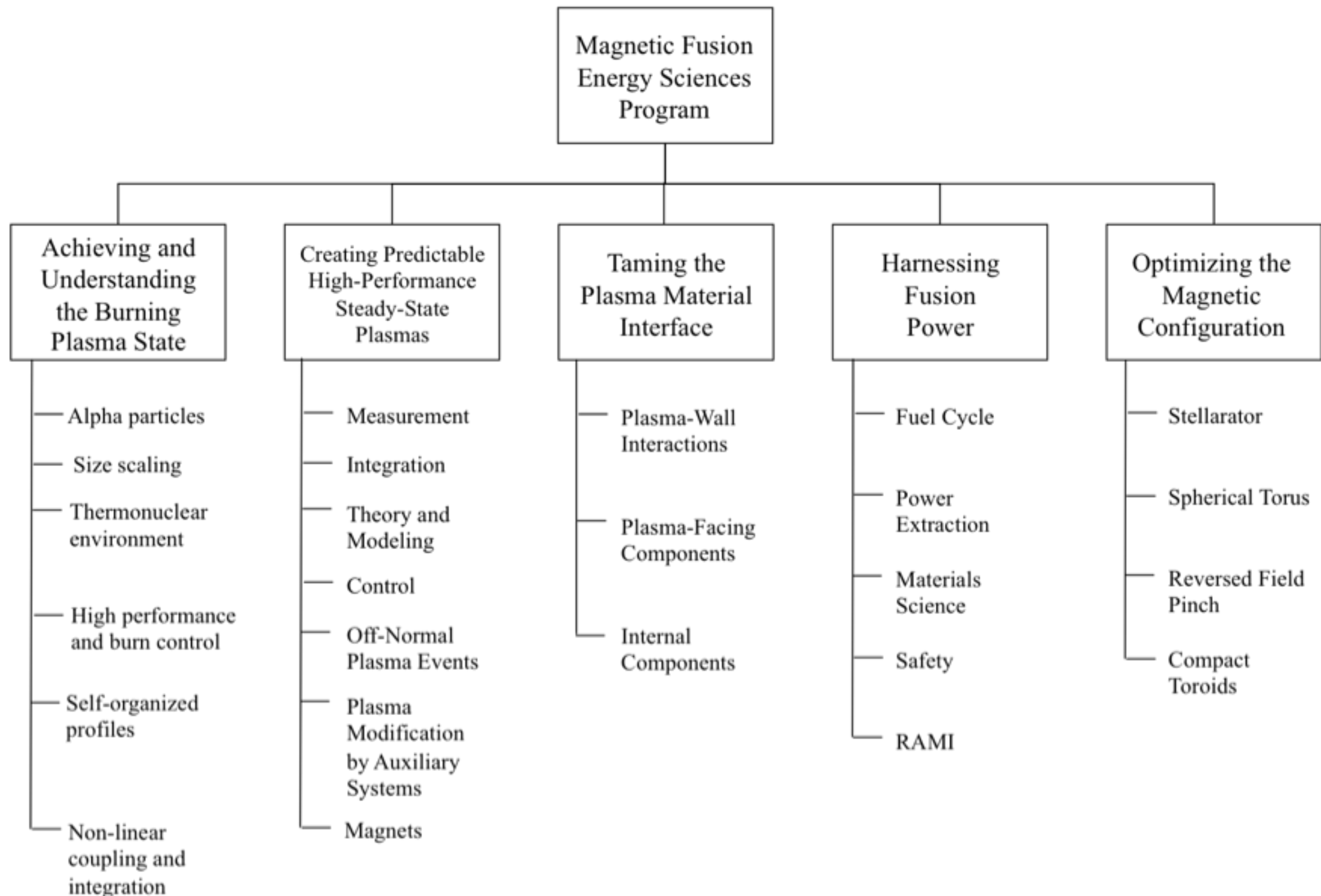
- Greenwald report establishes both the structure of the ReNeW organization and the starting point for ReNeW planning.
  - use (minor revision allowed) the fifteen issues identified by the Greenwald panel
  - modification: append issues and gaps identified in the TAP or EPAAct reports.
- mapping of the Greenwald issues and gaps onto ReNeW Themes and Panels straightforward:
  - three of the five ReNeW themes are taken directly from the Greenwald report.

# Initiatives

- ReNeW will describe its initiatives in higher detail than previous reports.
  - sufficient detail to allow an estimate of the required resources.
  - options, facility requirements and decision points.
  - Where more than one strategy or initiative could address a given gap, ReNeW will consider the relative merits of alternative approaches.
  - It will also consider the role of foreign programs and facilities to help address the gaps.

# Research Needs Workshop Structure

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## **Proposed ReNeW Preparation Schedule**

1. Panel organization complete Dec. 1, 2008
2. Issue detailed work plans Dec. 19, 2008
3. 5 Theme Workshops March 30, 2009
4. Winnow initiatives and make them consistent April 2, 2009
5. Issue draft report for Workshop. May 22, 2009.
6. ReNeW Workshop, Bethesda, MD June 7-13, 2009
7. Issue final report. July 17, 2009