TU Mathematics Department Meeting, 8/17/07

Attendance: Cabral Balreira, Ryan Daileda, Saber Elaydi, Al Holder, Brian Miceli, Natasa Macura, Peter Olofsson

- The meeting began by welcoming Peter Olofsson to the department.
- Saber Elaydi and Brian Miceli agreed to attend the academic fair on Sat. 8/18/07.
- Faculty Sponsorships
 - TM²G will be co-directed by Al Holder and Peter Olofsson.
 - The Putnam team will be co-directed by Brian Miceli and Cabral Balreira.
 - TUMS will be co-directed by Ryan Daileda and Saber Elaydi.
 - KME will be co-directed by Diane Saphire (agreed via email after the meeting) and Natasa Macura.
 - The MAA Liaison is Ryan Daileda. The department will support his membership in MAA; outside email duties, organizing student participation in the Texas Chapter meeting is expected.
 - Our TWIST representative is Natasa Macura.
- Suggested Topology Course discussion focused on two issues, 1) how much point-set topology versus algebraic or differential topology and 2) scheduling. General consensus was that the course should focus mostly on point-set topology with the last month or so focusing on other topics. This was supported by Cabral Balreira, who recently taught the course. There was unanimous support to introduce the course. With regards to the second topic, Al Holder suggested the formation of a committee to consider re-scheduling Algebra I, Analysis I, and 4xxx courses, with the intent being to better offer the curriculum. The committee was formed, see notes below. Except for the few words in the description about scheduling, the course is supported by the mathematics department.
- A departmental subcommittee was formed to consider some curricular issues. The committee members are Cabral Balreira, Al Holder, Ryan Daileda and Brian Miceli. The issues they were asked to consider are
 - Possible re-scheduling of upper divisional courses so that students are not forced into considering Algebra I and Analysis I in a single semester and so that the 4xxx courses are offered on a schedule that aligns well with Analysis I and Algebra I.

- The possibility of including 1307 and 1308 as part of our majors curriculum. Discussion on this topic started when Al Holder suggested that we adopt the policy of having students end with a terminal course in Calculus, either Calculus III or Calculus B, and if students satisfied this requirement with Calculus A and B, then they would need to complete an additional course numbered above 3000 to complete the major. A discussion of what students would miss ensued, and the suggestion that Calculus B include some material on the convergence of series and sequences for this proposal to be considered was discussed. The dependence of PDEs on vector calculus, which would not be covered in a Calculus A and B sequence, was mentioned. The committee was asked to consider alternatives and bring it to the department in a few weeks.
- Two other items were requested by Saber Elaydi. One, the consideration of the track descriptions in the course descriptions, and two, the re-consideration of different tracks for a BA and BS. Al Holder expressed reservations about different tracks, but there was general agreement that students would prefer the mathematics degree to be a BS instead of a BA. The decision some years ago to place the degree in the Arts category was made somewhat arbitrarily, and the committee is charged with considering alternatives.
- Saber Elaydi and Natasa Macura agreed to address the possibility of a differential equations course for our majors.
- The Senate's consideration of moving to a 3-2 course load was briefly considered, although Al Holder introduced the initiative and asked that his cynicism be a known quantity in his comments. This discussion was tabled until the next meeting, at which time Roberto Hasfura could represent the Senate's sub-committee more accurately.