Sixth International Symposium on
Quantitative Feedback Theory and Robust Frequency Domain Methods

(In conjunction with the First African Control Conference)

3-5 December 2003

University of Cape Town, South Africa

Organised and sponsored by the

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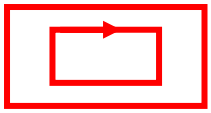

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Introduction

This symposium is the sixth in a series of conferences on Horowitz' Quantitative Feedback Theory (QFT) and related methods for robust frequency domain design. It was decided to incorporate this year's symposium into the First African Control Conference to save on the organisational overhead and this may be a model for future symposia in the series. The number of papers submitted to the symposium was rather disappointing, possibly because of limited advertising of the call for papers and possibly because of the cost of getting to South Africa for many potential authors.

The QFT philosophy is that feedback is only required to reduce the effect of plant uncertainty, unmeasured disturbances and instability. As such, feedback design must proceed from clear specifications, and from knowledge of the process and of the technical constraints on the design. This philosophy does not dictate the method of solution and the plant templates, Nichols charts, etc that have been associated with QFT are merely tools to achieve the desired outcome. The unresolved problems in QFT are essentially also unresolved problems for any engineering design: Design as opposed to synthesis is likely to involve solving non-convex problems, dealing with problems of dimensionality, and trading off conflicting requirements. In QFT design, the development of tools and insights for multivariable design and non-linear design is unfinished business.

International Symposium on
Quantitative Feedback Theory and Robust Frequency Domain Methods

Wright Patterson Airforce Base, Dayton, Ohio, August 1992
Purdue University, West Lafayette, Indiana, August 1995
University of Strathclyde, Glasgow, Scotland, August 1997
University of Natal, Durban, South Africa, August 1999
Universidad Pública de Navarra, Pamplona, Spain, August 2001
University of Cape Town, South Africa, December 2003

Venue

The conference will be held at the University's Breakwater Campus, which houses the Graduate School of Business (GSB). The Breakwater Campus includes the historic Breakwater Prison which has been renovated and is now used for less austere purpose of incarcerating students reading business degrees. This is situated within walking distance of Cape Town's V&A Waterfront district, which is one of the most popular tourist destinations in Africa. There are many hotels and a range of restaurants in the immediate vicinity. Further information can be found at:

www.uct.ac.za (for information about the University)
www.cape-town.org (for information about Cape Town, including tourism)

Registration

Registration will take place in the GSB foyer from 16h00 on Tuesday 2nd December, and from 08h00 on Wednesday 3rd December. The registration and help desk will be manned throughout the conference.

Social Programme and Related Technical Activities

3rd December:	Cocktail function in Cape Town's just-completed International Convention Centre, which we anticipate to be the venue for future SACAC and IFAC functions.
4th December:	Conference banquet at the Bay Hotel, on Cape Town's internationally famous Camp's Bay beach.
5th December:	Technical visit to SAB-Miller's historical first brewery, the Ohlsson's brewery in Newlands. Numbers will be limited.
6th December:	Annual inter-university RoboSoccer competition, hosted by SACAC. MTN Science Centre, Canal Walk, Cape Town.
	Technical tour of a state-of-the-art wine estate. Numbers will be limited.

Climate

The days should be warm and sunny, with some wind. The evenings may be cool enough to justify a jacket or pullover, and delegates wishing to visit Table Mountain, the Cape of Good Hope, or Robben Island are advised to bring some warmer clothing. All of these locations are within an hour's travel of the venue.

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