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SCIENCE AND ENGINEERING RESEARCH COUNCIL RUTHERFORD APPLETON LABORATORY

COMPUTING DIVISION

DISTRIBUTED INTERACTIVE COMPUTING NOTE 877 issued by Dr D A Duce DCS Conference 1984 - Discussion Paper 26 August 1983

DISTRIBUTION:

R W Witty D A Duce F B Chambers G P Jones DCS Panel Tech Mtgs/DCS Conf 1984

(see next page)

IN CONFIDENCE

SCIENCE AND ENGINEERING RESEARCH COUNCIL

Engineering Board

COMPUTING AND COMMUNICATIONS SUB-COMMITTEE Distributed Computing Systems Panel

DCS CONFERENCE 1984 - DISCUSSION PAPER

At the DCS Panel Policy Meeting on 26 July 1983 it was agreed that a Conference would be organised to mark the termination of the Programme. This paper presents some ideas on the form the Conference might take. Comments are invited.

VENUE

1. A provisional booking is being sought at the University of Sussex for <u>17-20 September 1984</u>. Professor Grimsdale has agreed to be the local organiser.

SUGGESTED FORMAT

2.	Mon	17/Tues 18	Pre-Conference	Tutorials	
	Wed	19/Thurs 20	Conference		
Thurs 20		rs 20	Conference Din	Dinner	

The final event of the Conference would be the Dinner on the Thursday evening. Delegates would depart after breakfast on the Friday morning.

TUTORIALS

3. The aim of the tutorials would be to give an extended coverage of some of the key areas covered by the Programme. Suggested topics and organisers are:

Dataflow computing	Dr J R Gurd
Declarative Languages & Architectures	Dr J Darlington & Dr M R Sleep
Closely Coupled Systems	Prof D Aspinall or Prof R L Grimsdale
Loosely Coupled Systems	Dr I C Wand or Dr K H Bennett

It is proposed that an organiser be appointed for each tutorial charged with producing a plan for either a 1 day or 2 day tutorial as appropriate, within a budget of £1K each.

Tutorial notes should be provided for attendees. Attendance at each tutorial would be limited to 50.

CONFERENCE

4. Mixture of review and research papers. Roughly 14 papers (threequarters of an hour slots) are required for the two days.

Possible topics and presenters in no particular order:

Review:

Concepts and models for distributed computing	R Milner
Declarative system architectures (update of Manchester Conference paper)	R Sleep
Construction and management of large distributed systems	M Sloman/J Kramer
Specification and proof techniques for distributed systems	C À R Hoare
Declarative languages	J Darlington or D Turner
Languages for distributed computing	R Bornat
Communications and distributed computing	R Needham/ A Herbert
Modelling distributed systems	I Mitrani
Closely Coupled Systems	R Aspinall/ R L Grimsdale/ D Evans

Individual Projects

Manchester dataflow project

ALICE

POLYPROC

Numerical Algorithms for distributed computing

DisArray

J Darlington/ M Reeve F Halsall/ R L Grimsdale

J R Gurd

D Evans

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Applications-Oriented Projects (Cooperative grants)

A Distributed Line monitoring System (with BL)

J Hughes/ M S Powell

The Design and Implementation of a Broad Band Local Area Network

R L Grimsdale/ F Halsall

Industrial Views

A number of industrialists might be invited to give their views of the DCS Programme, for example:

> B Cohen, STL P Cohen, Logica N Vince or M Watson, ICL

FINANCE

5. Leaving aside the cost of accommodation, food etc, the following proposal is made.

Tutorials

£1K each

Papers

Review papers	£500	each	
Project descriptions	£100	each	
Industrial views	£500	each	

Payments would cover preparation of lecture material, including a written paper and any necessary travel to research the paper. The aim is to stimulate high quality papers.

PUBLICATION

1. Tutorial notes to be issued to attendees.

2. Tutorial and conference papers to be published as a book.

Publication will entail considerable effort, but would be a worthwhile, lasting memorial to the Programme. Camera ready copy could be produced at RAL. There is considerable expertise at RAL in book production.

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