

SEMINAR ON CONTINUITY IN SEMILATTICES (SCS)

NAME: Karl H. Hofmann	Date	M	D	Y
		11	23	81
TOPIC: Miniworkshop on Continuous Lattices at Tulane University from Thursday, November 19, 1981 through Saturday, November 21, 1981				

We had a seminar at Tulane this November. In attendance were the following: Dennison Brown (U.Houston), Karl H.Hofmann (Tulane U.), John Isbell (SUNY at Buffalo), Robert J.Koch (LSU), Jimmie D.Lawson(LSU), Michael Mislove (Tulane U.), Jaime Niño (Loyola U. of the South), Albert Stralka (UC Riverside) plus colleagues and graduate students from Tulane University.

Workshops come in all forms and sizes; recall Tulane 1977, Darmstadt 1978, Bremen 1979, Riverside 1980, Bremen 1981. The one under review was a small one, but is was useful and, just as the previous ones; gave an impression on trends and drifts in the domain of interest of SCS.

The workshop began on Friday, November 20, 1981. By happenstance, the Tulane Computer Science Department had a visitor whose lecture was suitable enough for the participants in the workshop to be included in their schedule: Prof. Gzörggy Révész of the U.of Kentucky spoke on the "Axioms for the Theory of lambda conversion" (3 p.m.). Prof.Dennison Brown followed with a lecture on "Inner points and breadth in compact semilattices" (4:15 p.m.). He reported on joint work with James Stepp; those who participated in the Semigroup Conference in Oberwolfach in May will recall Stepp's lecture on this material. The day concluded with the traditional Tulane Mathematics Seafood Party which was held in honor of the workshop at this date.

Most of the workshop activity was concentrated on Saturday, Prof. John Isbell described his construction of a complete lattice on which the Scott topology is not sober. (9 a.m). Prof. Jimmie Lawson surveyed a sequence of open problems in the area (10 a.m.). He touched on convexity theory, spectral theory of semilattices, equationally compact lattices, injectives and projectives in the category of distributive bounded lattices, function spaces, valuations, the patch topology. Prof.Jaime Niño spoke on "More on duality of continuous posets" (11 a.m.); he reported on a portion of his dissertation (Tulane 1981). In the afternoon the reporter lectured on the existence and construction of free objects in the category of completely distributive lattices and sup- and inf-preserving morphisms (2 p.m.) Prof.Mislove gave a lecture on "Locally continuous lattices and applications" in which cross connections to certain problems in functional analysis were drawn. (3 p.m.). A report on a dissertation completed under his direction was given by Prof. Al Stralka, in which instructive examples of posets were constructed. (4 p.m.). Prof. R.J. Koch concluded the afternoon with a report on joint work with Haskell Cohen and J.D.Lawson; on some of this research search J.D.Lawson had lectured in the Darmstadt Mittagsseminar of AG 2 earlier this year, and Haskell Cohen described a portion at the Oberwolfach Semigroup Conference. The topic is the characterisation of semigroups on the 2-cell which are generated by two interval semilattices.

Most participants promised to circulate a memo on their contribution at the workshop either directly or via Tulane. Thus you should watch out for memos arriving in the near future. (John Isbell's paper was circulated earlier. His memo will treat a different topic out of a discussion between him and the reporter.)

— A complete library of all SCS-memos recorded in the Compendium, and the subsequent ones, has now been set up at the University of Bremen. Rudolf E.Hoffmann is the custodian and can be approached for sources. Another complete set exists at Tulane.