

RUTGERS UNIVERSITY

LIVINGSTON COLLEGE

Department of Computer Science

COLLOQUIUM

SPEAKER: *Jerome H. Saltzer*  
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TOPIC: "PRAGMATIC APPROACHES TO OBTAINING CORRECT OPERATING SYSTEMS"

ABSTRACT

An important problem facing computer system designers and implementors is assuring a correct (or sufficiently correct) implementation of the desired operating system functions. This problem is especially significant in the area of information protection and security, where an implementation error can render the protection facility worthless, but without the knowledge of the user depending on it. A research project at the M.I.T. Laboratory for Computer Science has been exploring various aspects of this problem, including the possibility that type-extension (usually considered to be a feature to be provided by the underlying system) might be a useful design discipline and organizing tool inside the operating system itself. Type extension seems to be a very powerful tool, but the usual concept must be advanced to account for multiplexing and the possibility of types with a limited number of example objects, and also to allow the type-interpreter (virtual processor) to be constructed using type extension.

DATE: *Thursday, November 11, 1976*

TIME: *2:40 p.m.*  
*(Coffee at 2:15 p.m.)*

PLACE: *Hill Center for Mathematical Sciences*  
*Room 705* *Busch Campus*

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