

ASL European Summer Meeting Logic Colloquium 2017

Stockholm University
14–20 August

<http://logic.math.su.se/lc-2017>

LOGIC in 2017
Stockholm

Special sessions:

Joint session of CSL2017 and LC2017 (Aug 20)

Category theory and type theory
in honor of Per Martin-Löf on his 75th birthday

History of logic

Model theory

Philosophical logic

Proof theory

Set theory

Tutorial speakers:

Patricia Bouyer-Decitre (LSV ENS Cachan)
Mai Gehrke (Paris 7)

Plenary speakers:

David Aspero (U East Anglia)
Alessandro Berarducci (Pisa)
Elisabeth Bouscaren (Paris 11)
Christina Brech (Sao Paulo)
Sakae Fuchino (Kobe U)
Denis Hirschfeldt (U Chicago)
Wilfrid Hodges (British Academy)
Emil Jeřábek (Prague)
Per Martin-Löf (Stockholm U)
Dag Prawitz (Stockholm U)
Sonja Smets (U Amsterdam)

LC2017 highlight speakers for the LC-CSL session:

Veronica Becher (Buenos Aires)
Pierre Simon (UC Berkeley)

Programme committee

Rod Downey (U Wellington)
Mirna Džamonja (chair, U East Anglia)
All Enayat (U Gothenburg)
Fernando Ferreira (U of Lisbon)
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Igor Walukiewicz (U Bordeaux)

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Logic Colloquium 2017

Stockholm, August 14-20, 2017

Programme and abstracts

BIRZHAN KALMURZAYEV AND NIKOLAY BAZHENOV, *Weakly precomplete dark computably enumerable equivalence relations.*

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We study computably enumerable equivalence relations (ceers). For the background, we refer the reader to [1].

A ceer E on ω is weakly precomplete if there exists a partial computable function fix such that for all e , if φ_e is total, then $fix(e) \downarrow$ and $\varphi_e(fix(e))Efix(e)$. We consider ceers relatively to the following well known reduction: a ceer R is said to be reducible to a ceer S (denoted by $R \leq_c S$) if there is a computable function f such that for all x and y , $xRy \Leftrightarrow f(x)Sf(y)$. A ceer E is called dark if it is incomparable with Id under reduction \leq_c . We have the following result.

THEOREM 1. *For any dark ceer E there is a weakly precomplete dark ceer F such that $E <_c F$.*

Badaev S.A. showed that there is an infinite ω -chain of non-equivalent weakly precomplete ceers. Our result implies that for any dark ceer E , there is an infinite ω -chain of non-equivalent weakly precomplete dark ceers over E .

[1] URI ANDREWS, SERIKZHAN BADAEV AND ANDREA SORBI, *A Survey on Universal Computably Enumerable Equivalence Relations, Lecture Notes in Computer Science*, vol. 10010 (2017), pp. 418–451.