

JAF40

40ème Journées sur les Arithmétiques Faibles
Weak Arithmetics Days

October 25–27, 2021, Athens, Greece

Steering and Program Committee

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Registration

To register, please send your details (full name, affiliation etc.) to cdimitr@phs.uoa.gr or visit the conference webpage:
<https://conferences.uoa.gr/e/jaf40>

Aim. Weak Arithmetics play a fundamental role in several areas of philosophy, mathematics, and computer science by studying the nature and properties of natural numbers from a logical point of view. The aim of the conference is to provide a forum for researchers to present their results to members of communities who study or apply weak arithmetics in various fields and formalisms.

Previous meetings were held in Lyon (1990), Paris (1990), Clermont (1991), Paris (1991), Clermont (1992), Paris (1992), Clermont (1993, 1994), Fontainebleau (1994), Clermont (1995), Fontainebleau (1995), Paris (1996), Metz (1996), St-Petersburg (1997), Mons (1997), Warsaw (1998), Clermont (1999), New York (1999), Clermont (2000), Fontainebleau (2001), St-Petersburg (2002), Naples (2003), Yerevan (2004), Fontainebleau (2005), Clermont (2006), Sevilla (2007), Athens (2008), Fontainebleau (2009), Warsaw (2010), Paris (2011), Samos (2012), Athens (2013), Göteborg (2014), New York (2015), Lisbon (2016), St-Petersburg (2017), Florence (2018), New York (2019).

Topics. Proofs in arithmetic with restricted systems of axioms. Non-standard models of such systems. Decidability, undecidability, and complexity of arithmetical theories. Definability in arithmetic structures. Machines, automata and words, related to arithmetic. Finite model theory.

Paper submission. Authors are invited to submit abstracts not exceeding *three pages* in the form of a pdf file to cdimitr@phs.uoa.gr.

Contributed talks so far

- D. Cantone, L. Cuzziol (University of Catania, Italy) and E. G. Omodeo (University of Trieste, Italy)
Six equations in search of a finite-fold-ness proof
- Ch. Cornaros (University of Aegean, Greece) and H.-A. Esbelin (Clermont University, France)
Versions of Matiyasevich's theorem in subsystems of arithmetic
- C. Dimitracopoulos and V. Paschalis (National and Kapodistrian University of Athens, Greece)
End extensions of models of $B\Sigma_1+exp$
- E. Jeřábek (Czech Academy of Sciences, Prague, Czech Republic)
Iterated multiplication in VTC^0
- M. Łelyk (University of Warsaw, Poland)
Metamathematics of the global reflection principle
- M. R. Starchak (Saint-Petersburg State University, Russia)
Quantifier elimination approach to existential linear arithmetic with GCD
- B. Wcisło (University of Warsaw, Poland)
Properties characterising truth and satisfaction