

האקדמיה הלאומית הישראלית למדעים The Israel Academy of Sciences and Humanities





ADAMS CONFERENCE FOR 2015 2015 כנס אדאמס לשנת

January 2015 ינואר

ADAMS CONFERENCE

Tuesday, January 27, 2015

כנס אדאמס

יום שלישי, ז' בשבט, התשע״ה

	Morning Session	מושב בוקר
9:30-10:00	Refreshments	כיבוד קל
10:00-10:10	Opening Remarks Prof. Amiram Grinvald Academy Member, Chairperson Adams Fellowship Committee	דברי פתיחה פרופ׳ עמירם גרינולד חבר האקדמיה, יו״ר ועדת מלגות אדאמס
10:10-10:20	Greetings Prof. Itamar Willner, Chairperson Natural Sciences Division	ברכות פרופ' איתמר וילנר, יו″ר החטיבה למדעי הטבע
10:20-11:05	Prof. David Harel Academy Member, Professor of Computer Science, The Weizmann Institute of Science – "Excellence or Professionalism?"	פרופ׳ דוד הראל חבר האקדמיה, פרופסור למדעי המחשב, מכון ויצמן למדע על ״מצוינות או מקצוענות?״
11:05-11:15	Questions and Answers	שאלות ותשובות
11:15-12:00	Prof. Jacob Bekenstein Academy Member, Professor of Theoretical Physics, The Hebrew University of Jerusalem – "Thermodynamics: From Steam Engines to Black Holes"	<mark>פרופ׳ יעקב בקנשטיין</mark> חבר האקדמיה, פרופסור לפיסיקה תיאורטית האוניברסיטה העברית בירושלים על ״התרמודינמיקה: ממנועי קיטור ועד חורים שחורים״
12:00-12:10	Questions and Answers	שאלות ותשובות
12:10-13:30	Lunch Afternoon Session	ארוחת צהריים מושב אחה״צ
13:30-15:00	Poster Competition	תחרות פוסטרים
15:00-15:45	Prof. Chava Turniansky Academy Member, Professor of Yiddish Literature, The Hebrew University of Jerusalem – "Hebrew and Yiddish: Two Languages, One Society"	<mark>פרופ׳ חוה טורניאנסקי</mark> חברת האקדמיה פרופסור לספרות יידיש האוניברסיטה העברית בירושלים על ״עברית ויידיש: שתי לשונות לחברה אחת״
15:45-16:00	Questions and Answers	שאלות ותשובות
16:00	Prizes	פרסים

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Greetings from **Prof. Amiram Grinvald**

Academy Member Chairperson, Adams Fellowship Committee

I am delighted to extend my warm greetings to all of the Adams Fellows. As is well known, the very high level of science in Israel rests upon our strength in the

realm of basic research. The nucleus for this success is constituted by the diligent graduate students who are at the forefront of scientific research. Israel is blessed with a wonderful cadre of top-notch, well informed, highly motivated, mature students, who not only provide the intellectual infrastructure for basic research but also represent future generations of senior scientists. Not surprisingly, Israeli postdoctoral researchers are in high demand in the USA and other nations that lead in scientific research.

The Adams Fellowship Program aims to strengthen this cadre by encouraging the very best students to go into advanced Ph.D. training. The program's generous financial backing allows these students to devote their full time to research. In addition, it creates a forum for discussing scientific issues and exchanging ideas. The Adams Conference is an important element in this program, especially in today's scientific arena, where multi-disciplinary cooperation is an essential ingredient in advancing research.

I would like to wish all of the participants success in their research. I hope that this forum will help promote additional collaborations and multidisciplinary research. I would also like to take this opportunity to thank the Adams Family and the leadership of the Israel Academy of Sciences and Humanities for their support and encouragement.

I believe that this program makes a major contribution to Israeli science. I look forward to working together with the Adams Family, the Israel Academy of Sciences and Humanities, and the many talented students and mentors involved in fulfilling the program's goals.

Sincerely,

Amiram Grinvald

Amiram Grinvald



Prof. David Harel

Academy Member Professor of Computer Science, The Weizmann Institute of Science

David Harel, born in London in 1950, received his Ph.D. from the Massachusetts Institute of Technology in 1978 and has been at the Weizmann Institute of Science in Israel since 1980. He was Head of the Department of Computer Science from 1989 to 1995 and Dean of the Faculty of Mathematics and Computer Science from 1998 to 2004. He was also co-founder of I-Logix, Inc. He has spent time at IBM Yorktown Heights and sabbaticals at Carnegie-Mellon University, Cornell University, and the University of Edinburgh.

After spending many years working mainly in theoretical computer science (logic, computability, automata, database theory), Harel now concentrates on software and systems engineering and on modeling biological systems. He is the inventor of Statecharts and co-inventor of Live Sequence Charts (LSCs), and he co-designed Statemate, Rhapsody, the Play-Engine and PlayGo. Among Harel's books are *Algorithmics: The Spirit of Computing* and *Computers Ltd.: What They Really Can't Do.* His awards include the ACM Karlstrom Outstanding Educator Award (1992), the Israel Prize (2004), the ACM Software System Award (2007), the Emet Prize (2010), and honorary degrees from universities in Italy, France, Israel, and the Netherlands. Harel is a Fellow of ACM, IEEE and AAAS, a member of the Academia Europaea and of the Israel Academy of Engineering and of the American Academy of Arts and Sciences.

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Prof. Jacob Bekenstein

Academy Member Professor of Theoretical Physics, The Hebrew University of Jerusalem

Jacob Bekenstein was born in Mexico City in 1947. He obtained his undergraduate and M.Sc. degrees in 1969 from the Polytechnic Institute of Brooklyn (now the Polytechnic Institute of New York University) and his Ph. D. in 1972 from Princeton University. After a postdoctoral fellowship at the University of Texas at Austin, he immigrated to Israel in 1974 to take up a faculty position at Ben Gurion University of the Negev. He became a full professor there in 1978 and the Arnow Professor of Astrophysics in 1983. He came to The Hebrew University of Jerusalem in 1990 and was named Polak Professor of Theoretical Physics in 1993.

Bekenstein's scientific interests have included gravitational theory in general, black hole physics (including black hole thermodynamics, which started with his work), relativistic magnetohydrodynamics, galactic dynamics, and the physical aspects of information theory. He is currently interested in designing realistic experiments to explore quantum gravity and in the role of space-time fluctuations in resolving various black hole paradoxes.

Bekenstein has been a member of the Israel Academy of Sciences and Humanities since 1997. He has been honored with the Bergmann Prize, the Landau Prize, the Rothschild Prize, the Israel Prize, the Weizmann Prize and the Wolf Prize, and he has been announced as the recipient of the 2015 Einstein Prize of the American Physical Society.



Prof. Chava Turniansky

Academy Member Professor of Yiddish Literature, The Hebrew University of Jerusalem

Chava Turniansky was born in Mexico City to parents from Eastern Europe. She grew up in a secular, pro-Zionist, Yiddish-speaking home, studied in a Jewish school and joined the Hashomer Hatza'ir youth movement. After attending a one-year program of studies in Jerusalem at the Seminar for Teachers in the Diaspora, she returned to Mexico for two years to teach Hebrew and Yiddish. During that time, she studied pedagogy at the Universidad Nacional Autónoma de México. In 1957 she immigrated to Israel and began studying Yiddish Literature and Jewish History at the Hebrew University of Jerusalem. Her Ph.D. dissertation on bilingual Hebrew and Yiddish literature in Ashkenaz in the early modern period was approved in 1974. She was a faculty member of the Hebrew University from 1963 until her retirement in 2005 and served for several long terms as head of its Department of Yiddish.

Turniansky's research, based on a combined literary, philological, historical, and sociological analysis of Old Yiddish manuscripts and printed books from the fourteenth through eighteenth centuries, places these texts in their wider cultural context. She considers their sources, functions and implications in the framework of Jewish bilingual (Hebrew and Yiddish) life and society and of that society's contacts with the surrounding cultures (German, Italian, Slavic, Dutch). Her publications shed light on diverse aspects of Ashkenazi life, literature and culture, such as literacy and transmission of knowledge, education and instruction of males and females, book production and book reception, and women readers and writers. She pays special attention to the function of Yiddish as a vehicle for transmission of the Hebrew sources, via translations and adaptations of the biblical text and teaching in the heder; to works dealing with actual events; and to the traces of Old Yiddish language and literature in the works of modern writers such as Isaac Bashevis Singer, Itzik Manger, and Abraham Sutzkever. Her critical edition and Hebrew translation of the memoirs of Glikl Hamel, for which she was awarded the 2006 Bialik Prize in Jewish Studies, sheds light not only on the life of one exceptional seventeenth-century Jewish woman in Central Europe, but on the world of Jewish women and of a whole Jewish society in the early modern period. She became a member of the Israel Academy of Sciences and Humanities in 2006 and was awarded the Israel Prize in 2013.

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Pictures of Adams Seminar, July 2014

