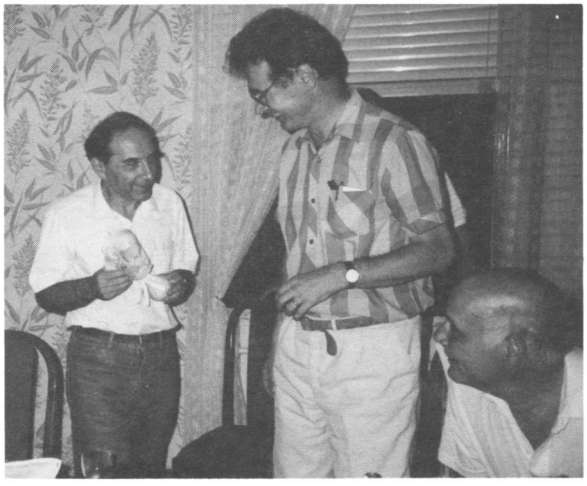
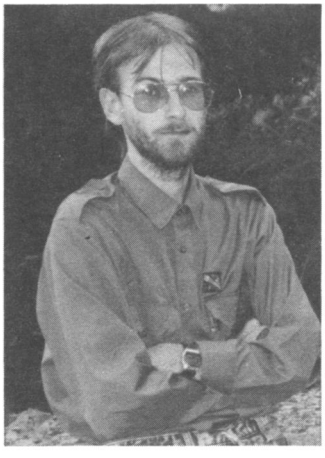
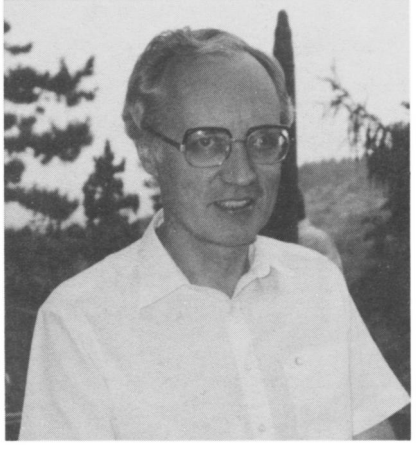
The number of participants at the Fifteenth Summer Symposium in Real Analysis was so large that they could not all be included in one photograph. On this page you will find pictured most of those who attended the meeting in Smolenice, Czechoslovakia.

ANDY AWARD WINNER
ALEKSANDER OLEVSKII



Here we see a surprised but obviously pleased Sasha Olevskii as he is given the award by the Chairman of the Organizing Committee, Professor Jaroslav Smítal.





The other members of the Organizing Committee worked very hard serving the participants of the conference. From left to right they are: Jana and Miroslav Chlebík, Bernd Kirchheim and Pavel Kostyrko.

Report on the SUMMER SYMPOSIUM in REAL ANALYSIS XV Smolenice, Czechoslovakia August 12–16, 1991

The Fifteenth Summer Symposium in Real Analysis was held August 12–16, 1991 at the Smolenice Castle, located approximately 45 km north of Bratislava. The hospitality of our hosts, the beautiful surroundings, the large number of participants, and the mathematics discussed (formally and informally) made this meeting a memorable one for all fortunate enough to attend. The Smolenice Castle is presently under the auspices of the Slovak Academy of Sciences and provided a unique and pleasant setting for this special week. The **Exchange** editorial staff wishes to thank the academy and the very accommodating staff at the castle for making this facility available and enjoyable. The conference organizing committee consisted of Jaroslav Smítal, Miroslav Chlebík, Bernd Kirchheim, and Pavel Kostyrko, all of Comenius University. Their efforts before, during, and after the conference are greatly appreciated. A huge word of appreciation must also go to Jana Chlebíková, who was found doing everything from assisting western visitors with the telephone to tirelessly typing abstracts, schedules, etc.

The conference featured invited hour addresses by:

- **ANDREW M. BRUCKNER** (*Santa Barbara*)
- **MIKLÓS LACZKOVICH** (*Budapest*)
- **ALEKSANDER OLEVSKII** (*Moscow*)

Forty–four speakers contributed twenty minute talks, and a lively problem session was held late Tuesday, prefaced by an invited presentation of some open problems by

- **PAUL ERDŐS** (*Budapest*).

The participants included:

Marek Balcerzak (*Lodz*), Jozef Bobok (*Prague*), Benedetto Bongiorno (*Palermo*), Ján Borsík (*Košice*), Andrew M. Bruckner (*Santa Barbara*), Judith Bruckner (*Santa Barbara*), Zoltán Buczolich (*Budapest*), Peter S. Bullen (*Vancouver*), Miroslav Chlebík (*Bratislava*), Joanna Czarnowska (*Gdańsk*), Paul Erdős (*Budapest*), Michael J. Evans (*Raleigh*), Janina Ewert (*Słupsk*), Vladimir V. Fedorenko (*Kiev*), Richard G. Gibson (*Columbus*), François Guénard (*Paris*), Ján Haluška (*Košice*), Jacek Hejduk (*Lodz*), Ralph Henstock (*Londonderry*), Petr Holický (*Prague*), Roman Hric (*Banská Bystrica*), Patricia Hug (*Paris*), Paul D. Humke (*Northfield*), Jan Jastrzębski (*Gdańsk*), Jacek M. Jędrzejewski (*Bydgoszcz*), Roy A. Johnson (*Pullman*), A. Katafiasz (*Bydgoszcz*), Václav Kelar (*Prague*), Bernd Kirchheim (*Bratislava*), Pavel Kostyrko (*Bratislava*), Milan Kuchta (*Bratislava*), Anna Kucia (*Katowice*), Jaroslav Kurzweil (*Prague*), Grazyna Kwiecińska (*Gdańsk*), Miklós Laczkovich (*Budapest*), Lee Larson (*Louisville*), Jan S. Lipiński (*Gdańsk*), Jaroslav Lukeš (*Prague*), Dorothy Maharam Stone (*Boston*), Jan Mařík (*East Lansing*), Pieter Maritz (*Stellenbosch*), Milan Matejdes (*Zvolen*), Ladislav Mišík (*Bratislava*), Pat Muldowney (*Londonderry*), Tomasz Natkaniec (*Bydgoszcz*), Andrzej Nowak (*Katowice*), Aleksander Olevskii (*Moscow*), Sofia Olevskii (*Moscow*), Richard J. O'Malley (*Milwaukee*), Washek F. Pfeffer (*Davis*), Andrzej Rychlewicz (*Lodz*), Aleksander N. Šarkovskii (*Kiev*), Štefan Schwabik (*Prague*), Andrej G. Sivak (*Kiev*), Valentin Skvortsov (*Moscow*), Jaroslav Smítal (*Bratislava*), Ľubomír Snoha (*Banská Bystrica*), Arthur H. Stone (*Boston*), Andrzej Szymanski (*Slippery Rock*), Jaroslav Tišer (*Prague*), Jaromír Uher (*Prague*), Peter Vojtáš (*Košice*), Rudolf Výborný (*Queensland*), Clifford E. Weil (*East Lansing*), Luděk Zajíček (*Prague*), and Piotr Zakrzewski (*Berlin*).

A number of accompanying spouses and family members also attended and added to the fellowship of the week.

At the traditional Symposium Banquet Jaroslav Smítal announced the organizing committee's selection for the winner of this year's **ANDY AWARD** and that selection was greeted with a rousing round of applause. The winner is

ALEKSANDER OLEVSKII.

PROGRAM of the SMOLENICE SYMPOSIUM

(The page number in the right hand column refers to the page of this issue on which a summary of the presentation is located. An * in this column indicates that a summary was not available from the speaker at the time of printing.)

MONDAY Morning: Chairman: *A. M. Bruckner*

09.10 – 10.10 *M. Laczkovich* ..... p. 15
Paradoxical decompositions using Lipschitz functions

10.20 – 10.40 *Z. Buczolich*..... p. 16
Bi-Lipschitz mappings and density points

11.00 – 11.20 *P. Humke*..... p. 17
Remarks on the density (property) of O'Malley

11.30 – 11.50 *L. Zajíček*..... p. 18
A note on σ-porous sets

12.00 – 12.20 *M. J. Evans*..... p. 19
Symmetric porosity and symmetric Cantor sets

MONDAY Afternoon: Chairman: *L. Mišík*

15.30 – 15.50 *R. Henstock*..... p. 21
The integral over product spaces, and Wiener's formula

16.00 – 16.20 *J. Kurzweil*..... p. 23
Differentiability and integrability in n dimensions
with respect to α–regular intervals

16.30 – 16.50 *R. Výborný*..... p. 25
Kurzweil–Henstock integration and the strong Lusin condition

17.30 – 17.50 *P. Muldowney*..... p. 27
Integration of a functional

18.00 – 18.20 *W. F. Pfeffer*..... p. 29
A Voltera type derivative of the Lebesgue integral

18.30 – 18.50 *B. Bongiorno*..... p. 30
Remarks on nonabsolutely convergent integrals in the real line

TUESDAY Morning: Chairman: *J. Kurzweil*

09.00 – 10.00 *A. Olevskii* ..... p. 32
Change of variable in Fourier analysis

10.10 – 10.30 *V. Skvortsov* ..... p. 33
Some inversion results for the generalized Walsh-Fourier transform

11.00 – 11.20 *C. E. Weil* ..... p. 35
Multipliers of classes of derivatives

11.30 – 11.50 *J. Mařík* ..... p. 37
The equation $f^2 + g^2 = h^2$, where f, g, h are derivatives

12.00 – 12.20 *P. Kostyrko* ..... p. 39
Symmetric approximate derivatives are uniformly closed

TUESDAY Afternoon: Chairman: *P. D. Humke*

15.00 – 15.20 *T. Natkaniec* ..... p. 40
On some problems concerning almost continuity

15.30 – 15.50 *A. Szymanski* ..... p. 42
Almost continuous functions and almost Baire functions

16.00 – 16.20 *J. Ewert* ..... p. 44
The topology of semilocal connectedness and s-continuity of maps on product spaces

17.00 – 17.30 *P. Erdős* ..... see Queries Section
On some problems in measure theory and geometry

17.30 Problem session ..... see Queries Section

WEDNESDAY Morning: Chairman: *J. Mařík*

09.00 – 09.20 *M. Matejdes* ..... p. 46
Continuity and measurability of path derivatives

09.30 – 9.50 *J. Hejduk* ..... p. 48
Non–Baire sets in category bases

10.00 – 10.20 *G. Kwiecinska* ..... p. 50
Measurability of multifunctions of two variables

10.40 – 11.00 *D. Maharam Stone* ..... p. 52
On a combinatorial theorem of Curtis Greene

11.10 – 11.30 *A. Stone* ..... p. 53
A parametrization theorem for generalized Borel sets

11.40 – 12.00 *P. Maritz* ..... p. 54
On approximation spaces

THURSDAY Morning: Chairman: *J. Smítal*

09.00 – 10.00 *A. M. Bruckner* ..... p. 56
Three forms of Chaos and their associated attractors

10.10 – 10.30 *Ľ. Snoha* (with *S. F. Kolyada)* ..... p. 57
On ω-limit sets of triangular maps

11.00 – 11.20 *A. N. Šarkovskii* ..... *
Random attractors in deterministic problems

11.30 – 11.50 *A. G. Sivak* ..... p. 59
On structure of σ-limit sets

12.00 – 12.20 *V. V. Fedorenko* ..... *
On a classification of trajectories of a map of the interval

THURSDAY Afternoon: Chairman: *M. Laczkovich*

15.30 – 15.50 *J. Smítal* ..... p. 61
Dynamical systems on the interval

16.00 – 16.20 *R. J. O'Malley* ..... p. 63
Ergodic theory and first-return sequences

16.30 – 16.50 *M. Kuchta* ..... p. 64
Shadowing property for continuous maps with zero topological entropy

17.30 – 17.50 *B. Kirchheim* ..... p. 66
Typical functions in subspaces of $\mathcal{B}^1$: thick or thin ?

18.00 – 18.20 *P. Vojtáš* ..... *
On isomorphism of quotients of comparision ordering of divergent series and of $\mathcal{P}(\mathcal{N})/\mathrm{fin}$

18.30 – 18.50 *P. Zakrzewski* ..... p. 67
Strong Fubini theorems from measure extension axioms

FRIDAY Morning: Chairman: *R. J. O'Malley*

09.00 – 09.20 *R. G. Gibson* ..... p. 69
Concerning a characterization of continuity

09.30 – 09.50 *J. Jastrzębski* ..... *
Remarks on points of almost continuity

10.00 – 10.20 *A. Rychlewicz* ..... *
On the algebraic embeddability in the class of functions possessing connected graphs

11.00 – 11.20 *M. Balcerzak* ..... p. 71
Some remarks on sup-measurability

11.30 – 11.50 *J. Borsík* ..... p. 73
On limits of quasicontinuous, simply continuous and cliquish functions

12.00 – 12.20 *J. M. Jędrzejewski* ..... *
Some properties of subclasses of Darboux functions

FRIDAY Afternoon: Chairman: *C. E. Weil*

15.30 – 15.50 *A. Nowak* (with *A. Kucia*) ..... p. 75
Measurable fields of metric spaces

16.00 – 16.20 *J. Czarnowska* ..... p. 77
On the Darboux property of multivalued maps

16.30 – 16.50 *A. Katafiasz* ..... p. 79
The improvable discontinuous functions

17.30 – 17.50 *J. Haluška* ..... p. 81
On Jegorov theorem for nets of measurable functions

18.00 – 18.20 *L. Larson* ..... p. 83
Some topics concerning $\mathcal{I}$-density continuous functions

18.30 Closing of the Summer Symposium and Symposium Banquet