

“Survey statistics is cool and hot” –
remembering Gunnar Kulldorff



Danutė Krapavickaitė
Vilnius Gediminas Technical University

Imbi Traat
University of Tartu

Workshop of Baltic-Nordic-Ukrainian
Network on Survey Statistics
August 21-24, 2018, Jelgava, Latvia

Outline

- Getting acquainted with Gunnar Kulldorff
- Scientific cooperation - visits to Umeå University
- Creation of the BNU and its events
- Personality of Gunnar
- Gunnar's family
- Final words

Gunnar's slides in Summer School: Minsk, June 14-18, 2013 (99 slides, last participation and talk)

We use some of these slides

*Summer School on Survey Statistics
June 14-18, 2013 in Minsk*



Gunnar Kulldorff, University of Umeå



Opening Address

***The Statistical Science
Is International***

***– And Survey Statistics
Is Cool and Hot***

Survey Statistics Is Cool

Intellectually, Educationally and Professionally

- Challenging **theory**, concepts and mathematics
- Smart **expertise** for planning and implementation of surveys
- Accurate and honest **analysis** of survey results

Survey Statistics Is Hot

Economically and Politically

- **Business and stock markets** are influenced by economic surveys
- **Governments** are influenced by economic and social surveys
- **Elections** are influenced by surveys describing progress and problems in the country

Getting acquainted with Gunnar Kulldorff

1991 re-independence of Baltic countries

1991 Gunnar visits Baltic countries

Seminar in Tartu

Proposes possible cooperation areas with Umeå University

- Survey sampling
- Survival analysis
- Quality control

Cooperation between Baltic and Nordic countries in survey statistics has begun

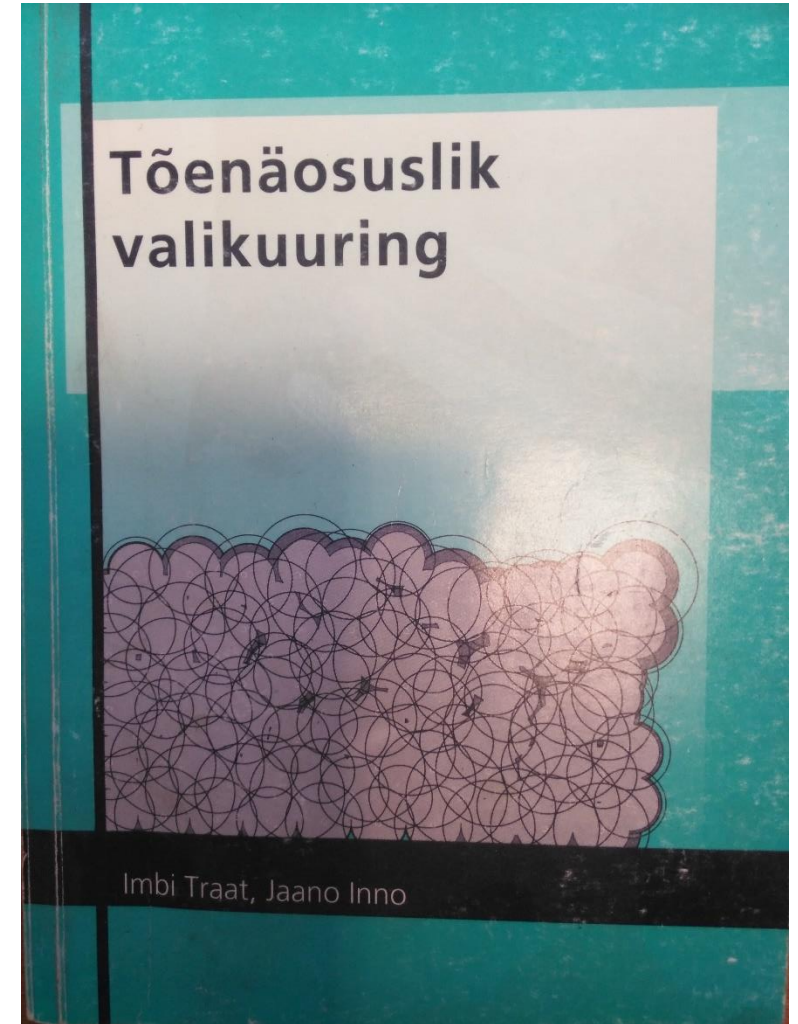
Imbi 1992

Jānis 1994



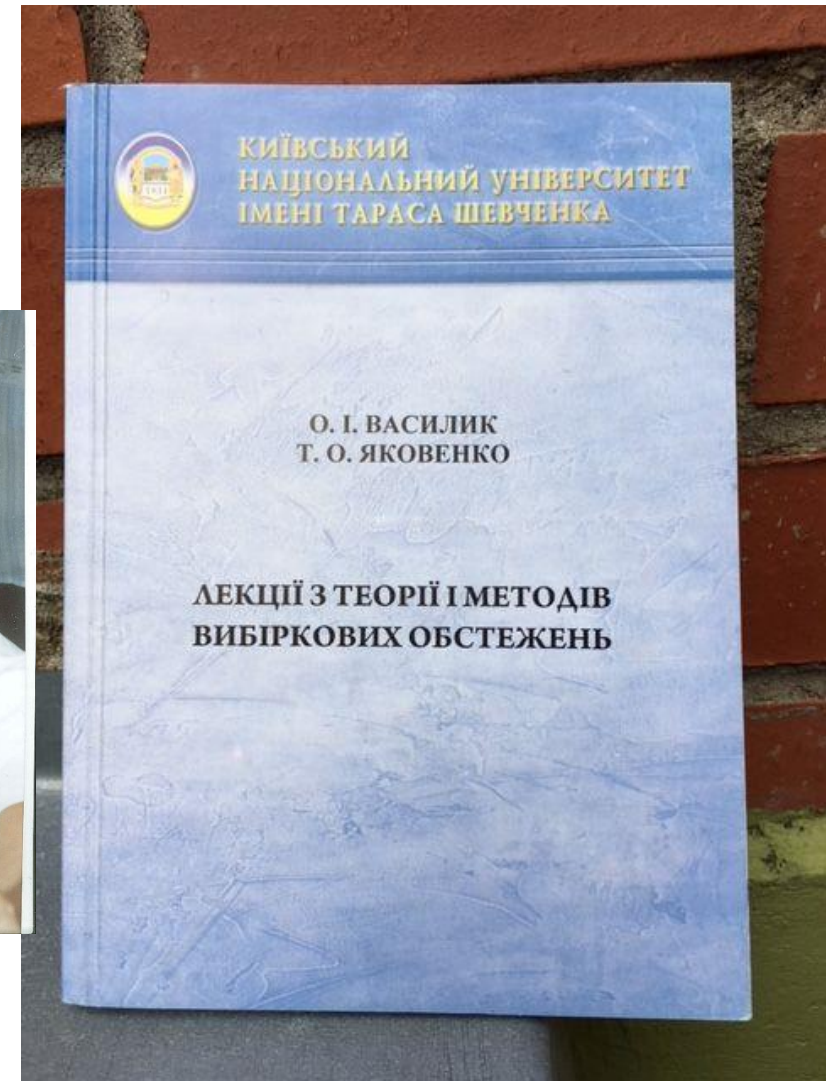
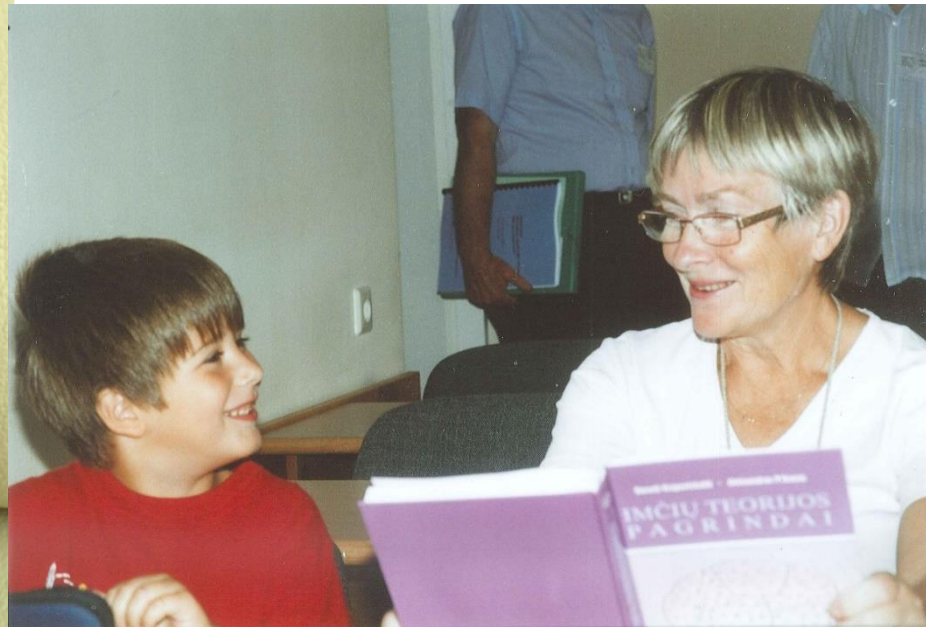
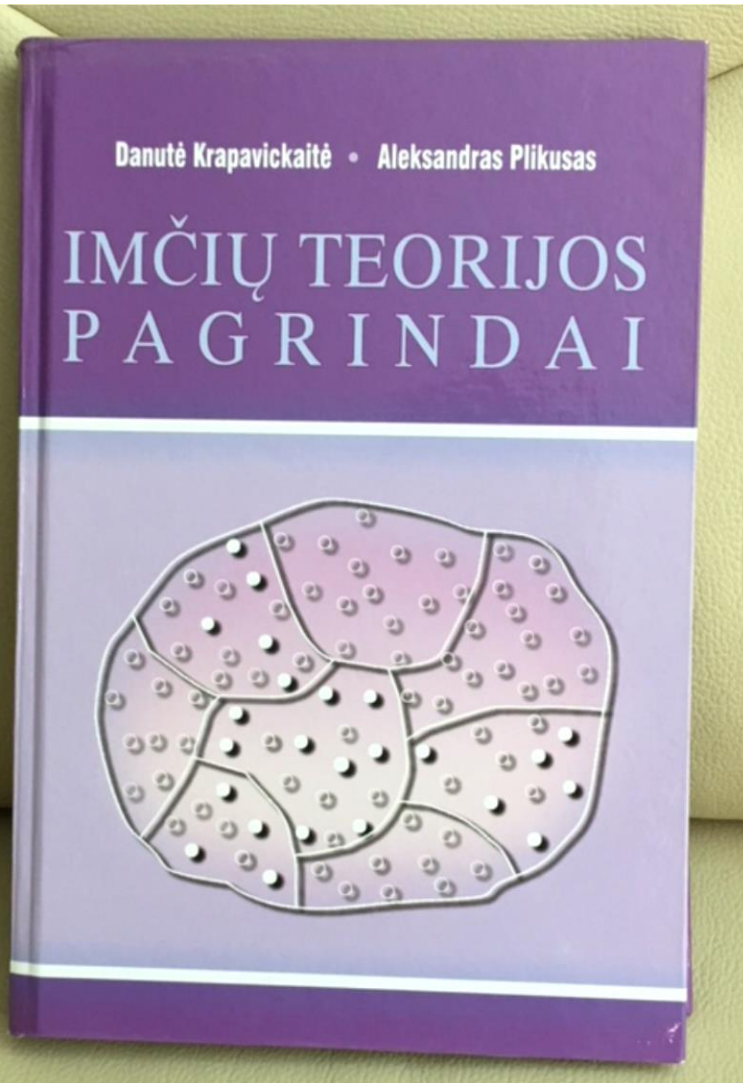
What we did there?

- Learning SS from Gunnar's lectures
- Preparing my own course for Tartu in SS (1993)
- Obtaining new ideas for teaching, for supervising
- Writing a textbook in survey sampling (1997)
- Introducing other new courses in Tartu inspired by visits



Textbook by Danute and Aleksandras 2005

Textbook by Olga Vasylyk and Tetyana Yakovenko 2010



Umeå University library

The Northern lights



Room for guests, Gamlia



Impressions of Umeå University

- Rich Library, important in those days
- Gunnar took care of ordering sampling books and journals
- All day round entry to the building and necessary rooms
- Lunch room, free coffee, fruits
- Working conditions for University teachers and guests
- Easy communication between University teachers and students
- Gunnar shares facilities of his University with the guests and says: „*I'll never stop*“

Guests were invited to the Department's events, also to Gunnar's home

Planeringsdagar



In back yard of Gunnar and Barbro



Visitors, visits and visit days at the Umeå University by country

| Country | Timing | Visitors | Visits | Days |
|------------------|-----------|-----------|------------|-------------|
| Estonia | 1992-2010 | 10 | 41 | 1431 |
| Latvia | 1994-2011 | 19 | 31 | 838 |
| Lithuania | 1998-2011 | 14 | 30 | 847 |
| Ukraine | 1994-2012 | 15 | 28 | 883 |
| Belarus | 2010-2012 | 5 | 6 | 160 |
| Total | 1992-2012 | 63 | 136 | 4159 |

UMEÅ UNIVERSITET
Matematisk statistik
Gunnar Kulldorff



2010-04-08

Gästforskare från Ukraina:
Nataliya Semenovska



besöker oss under perioden 7-30 april.

Det är hennes första besök i Umeå och det ingår i vårt samarbete med de baltiska länderna och Ukraina angående utbildning, forskning och forskarutbildning i stickprovsundersökningars teori och metodik. Samarbetsprojektet heter *Baltic-Nordic-Ukrainian Network on Survey Statistics* och stöds av Svenska institutet genom Visbyprogrammet.

Nataliya föddes 1980 i Kyiv i Ukraina och tog doktorsexamen i fysik och matematik

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Gunnar Kulldorff

An example of the information letter about a visitor to the Department

Beginning of the Network 1996

- First, a Baltic-Nordic Network, later extended to Ukraine and Belarus.
The aim
- Long-term cooperation on education and research in survey statistics
- Exchange of knowledge, experiences and ideas
- Strengthen contacts between university teachers, students, researchers and practitioners
- Between academic institutions and national statistical agencies
- Promote interest among students and motivate them to choose survey statistician as their professional career

First Summer School June 26 – July 2, 1997 in Tartu



Organizing Committee, Tartu 1997

Vision of Gunnar



Organizing Committee, Jurmala 1998

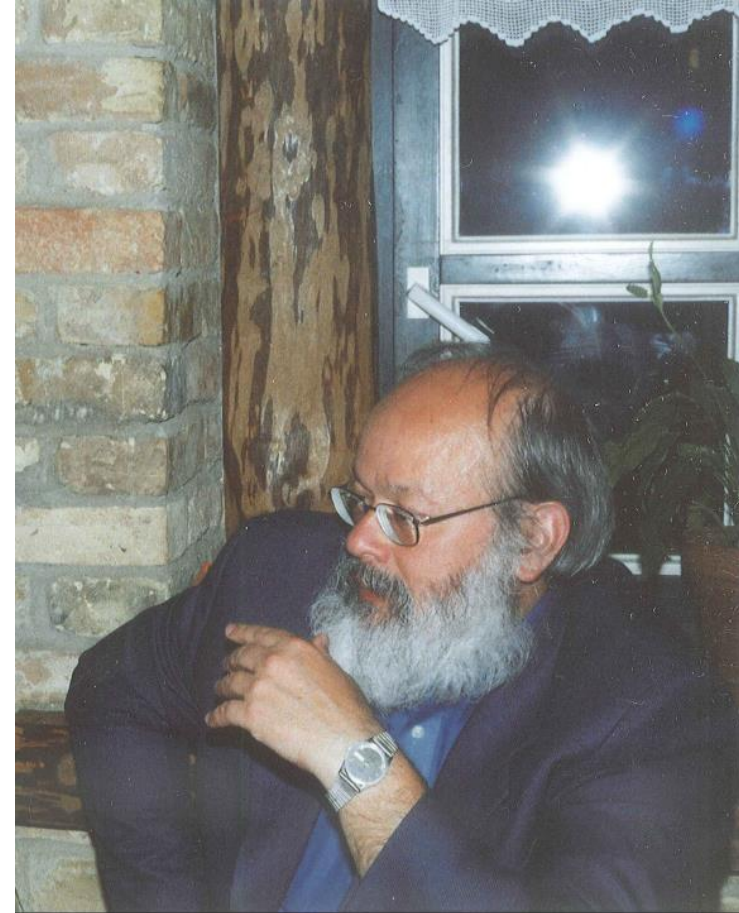


Main lectures, always well-known

Jan Wretman, 1998



Ray Chambers, 2005



Other important lecturers

Yves Berger, Jean-Claude Deville, 2011



Risto Lehtonen, Isabel Molina, 2014



Kuressaare 2000



Entertainment always belongs to farewell party, Kuressaare 2000



Tallinn, 2014

Song contest

n



34 Doctoral dissertations have
been defended in the Network

<https://wiki.helsinki.fi>

Defendant: Pauli

Opponent: Aleksandras

Chair: Seppo

Supervisor: Imbi



Number of Bachelour and Master theses in Baltic written in Baltic universities during 1995-2013

| Country | Bachelour | Master | Total |
|-----------|-----------|--------|-------|
| Estonia | 31 | 15 | 46 |
| Latvia | 34 | 9 | 43 |
| Lithuania | 75 | 45 | 120 |
| Total | 140 | 69 | 209 |

Number of graduation thesis on survey statistics in Belarus and Ukraine universities during 2003-2013

| Country | Bachelour | Specialist | Master | Diploma | Total |
|---------|-----------|------------|--------|---------|-------|
| Belarus | – | – | – | 5 | 5 |
| Ukraine | 8 | 3 | 7 | – | 18 |
| Total | 8 | 3 | 7 | 5 | 23 |

Events

- 22 Network events have been organized during 1997-2018. Their aim can be shortly formulated as exchange of knowledge between generations, because knowledge of participants varies from beginners to experts without any limits for age.
- 4 Summer Schools on Survey Sampling Theory, Methodology and Practice: 1997 in Tartu (49 participants), 2009 in Kyiv (48 participants), 2013 in Minsk (32 participants), 2016 in Kyiv, totally ~170 participants, have been held up.
- 14 Workshops on Survey Sampling Theory and Methodology with totally ~560 participants.
- 4 conferences Ammarnäs 2002, Kuusamo 2007, Norrfällsviken 2011, Helsinki 2015

Where will be next conference?

- Gunnar asked me in Minsk (2013) to promise to organize a conference BaNoCoSS in 2019. I promised.
- The next BaNoCoSS in 2019 will be held in Sweden, as it has to be according to the natural order of the events.

Attraction of statisticians to survey statistics

- **International Vilnius Conferences on Probability theory and mathematical statistics** 2006, 2010 – section on survey sampling
- **International Conference. Computer Data Analysis and Modeling**, Minsk, 2007 – presentations of the Network members on survey sampling
- Picturesque invitations

International Vilnius Conference 2006 with Survey Sampling

Dear Survey Statistician,

May I offer you an exciting conference proposal this year?

Would you like to meet and listen to the following invited speakers?

- **Jon Rao** from Carleton University in Canada (<http://lrsp.carleton.ca/directors/rao/>) on *Analysis of Survey Data: Recent Developments*
- **Alastair Scott** from the University of Auckland in New Zealand (<http://www.stat.auckland.ac.nz/showperson?firstname=Alastair&surname=Scott>) on *The Design and Analysis of Two-Phase Analytic Surveys*
- **Mary Thompson** from the University of Waterloo in Canada (http://www.stats.uwaterloo.ca/stats_navigation/Faculty/Thompson.shtml) on *Modelling Transitions with Survey Data*



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Welcome to the 9th Vilnius Conference and its session on Survey Sampling!

Gunnar Kulldorff

Organizer of the session on Survey Sampling

gunnar@matstat.umu.se

Gunnar Kulldorff 1927-2015

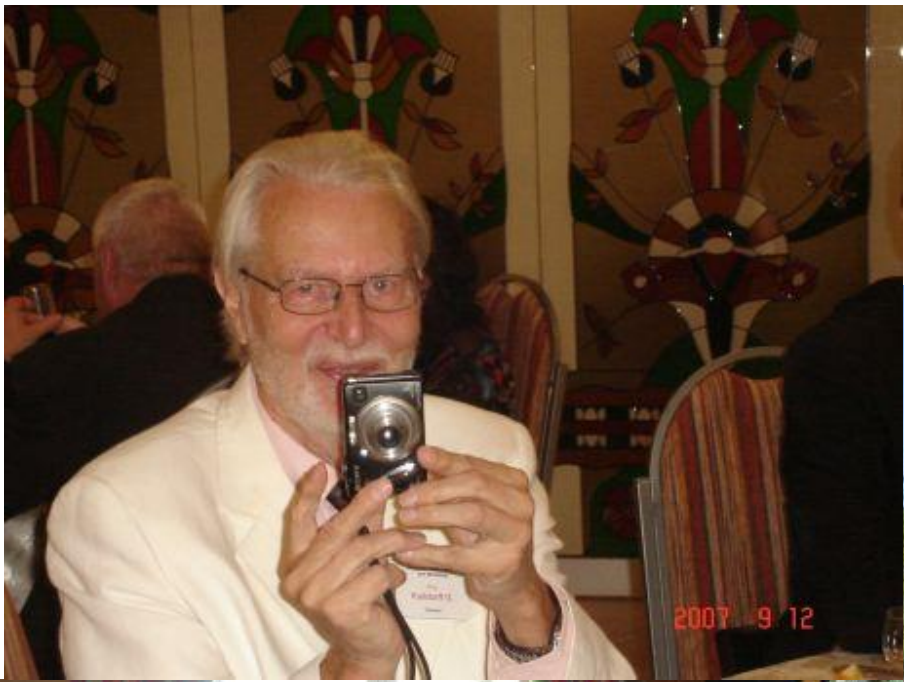
- Born in Malmö, Sweden
- 1954 licentiate degree from Dept. of Statistics, Lund university
- 1961 PhD *Contributions to the theory of estimation from Grouped and partially grouped Samples*. Supervisors C.-E. Quensel, H.Cramér.
His thesis republished by Wiley & Sons and by the Soviet Union in a Russian translation.
- 1965 professor of statistics at the newly established Umeå University;
1966 professor of mathematical statistics.
- Devoted to promotion of statistics at the international level. Elected to the International Statistical Institute in 1968, vice-president 1981-1985, president elect 1987-1989, president 1989-1991.
- 1991 visit to the Baltic countries, initiated scientific exchange program between the Baltic and Nordic countries.
- 2006 honorary doctor of Vilnius University

Promotion of Gunnar in Vilnius



Features of personality

- Young in his soul and spirit
- Very social
- Wonderful memory
- Interested in people
- Follows scientific advances
- Is aware in new subject matter books
- Supporter of young statisticians
- Perfect organizer, administrator
- Accurate documentation keeper, application writer
- Great photographer
- Interested in art, theater, music
- Admirable tamada'
- Gentleman



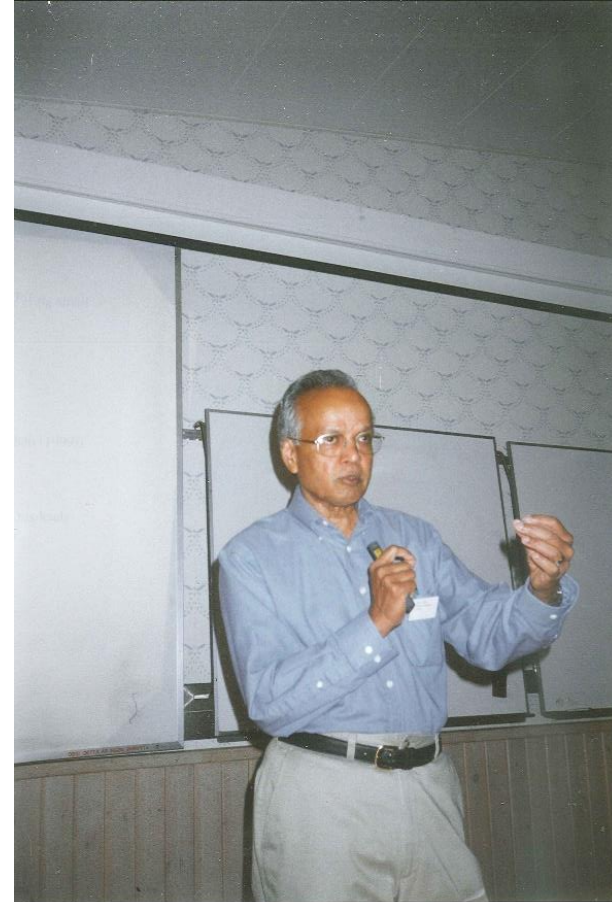
- Gunnar has been the main soul of the Network events
 - In organization, in formation and fine tuning the programme
- He has introduced
 - the format presentation+discussion
 - the format of farewell parties with entertainments
 - Tomada´
 - Steering Committee meeting with summaries and proposals
- He has been interested in every participant, talking to anyone
- He has made photos and created well-documented albums of workshop events
- He took care of the survival of the Network when he became ill. In the Steering Committee meeting in Minsk he stepped back and Risto became a leader of the Network

Examples of Gunnar's photography

Carl-Erik



J.N.K. Rao

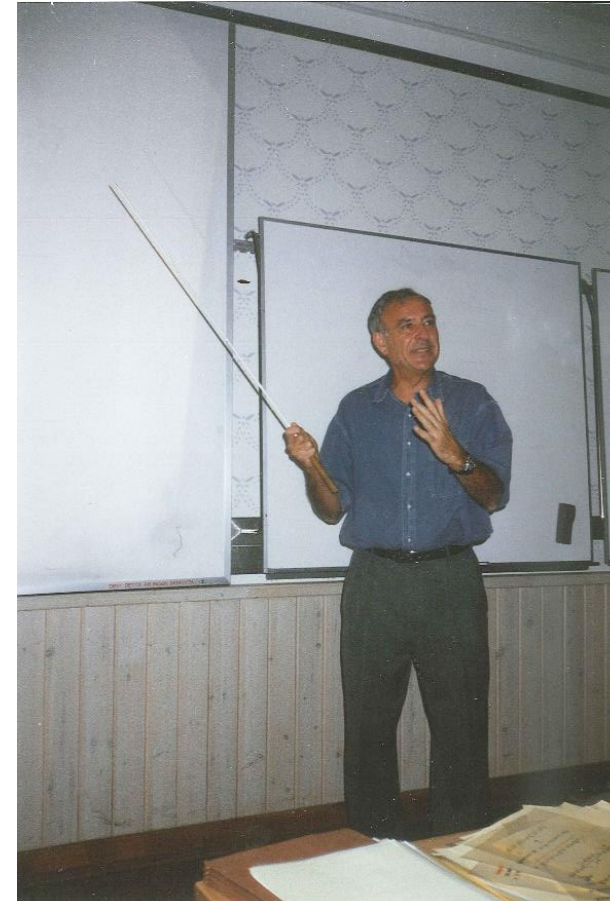


More examples

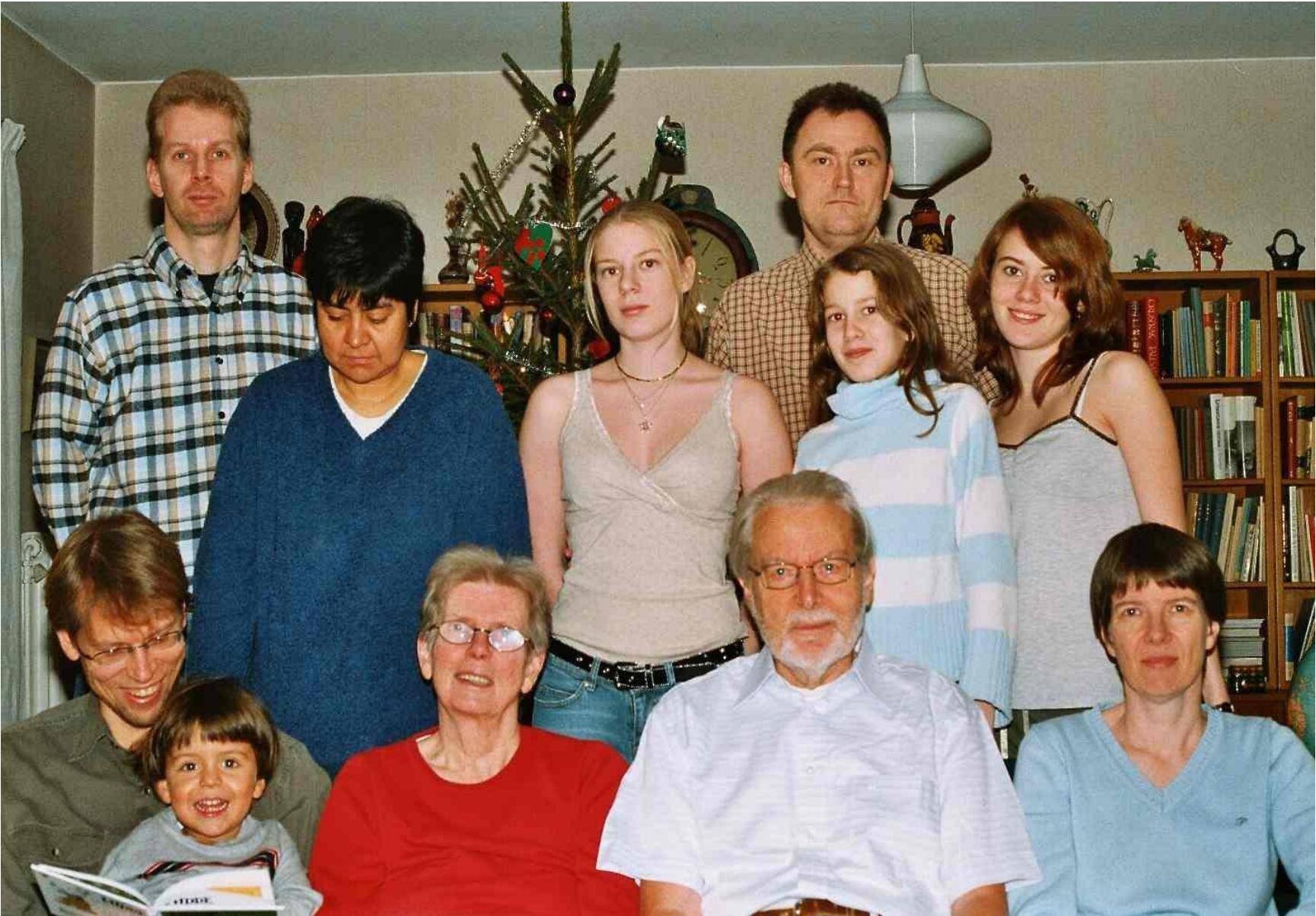
Monica Pratesi



Danny Pfeffermann



Gunnar's family



Gunnar is buried in Vittsjö



Final words

- Everyone remembers Gunnar who has met him at least once
- Baltic-Nordic-Ukrainian network is a result of his visionary thinking and activities
- Address to the younger generation: Please continue the activities of BNU. Search for the new forms of the cooperation and new financing sources.
- Continue the existing cooperation, and Gunnar will be happy observing us from high.