Welcome to

NC U∑

NORMA 24

Interplay between research and teaching practice in mathematics education

At DPU June 4 -7, 2024





1

Program for the opening

- ❖ Welcome at DPU by Head of department Helle Rørbech
- Welcome to NORMA 24 by the co-chairs Charlotte Krog Skott and Morten Blomhøj
- Presentation of NOMADs awards of best papers by Cecilia Kilhamn
- ❖ Two songs accompanied on piano by Birgitte Lundtoft

The relationship between theory and teaching practice is a long-standing challenge in the field of mathematics education research

NC U∑

In other words, the didactical theory should be constructed and evaluated in relation to the needs and difficulties that appear in the instruction, i.e., in the practice of mathematics instruction. Thus, didactical theory, seen as systems of viewpoints, must include suggestions for strategies that can aid consideration of, as well as opposition to, the instructional needs and difficulties, which the theoretical "core" in question relates to. (Christiansen, 1990, p. 1)



Bent Christiansen (1921-1996) Professor at DLH now DPU 1960-1991 Vice-president for ICMI 1975-1986 https://www.icmihistory.unito.it/portrait/ christiansen.php#scien

3

Mathematics education research as a field for interplay between developing and researching practices of mathematics teaching



NC U≥

166 participants from 12 countries

NC U∑

Norway: 71 Denmark: 45 Sweden: 28 Iceland: 5 Estonia: 4 Germany: 3 USA: 3 Finland: 2 UK: 2 Lithuania: 1 Canada:1 Italy: 1



Percentages of participants in relation to a country's population:

Iceland Norway Denmark Estonia Sweden

5

Number of accepted contributions

Regular papers: 54

Short communications: 25

Posters: 13

Working groups: 3

Symposia: 0

 $75\,\%$ of the submitted regular papers are to be presented at

Norma

Review process for NORMA proceedings





The proceedings will include contributions from authors of regular papers, working group teams, plenary speakers and the panel debate team.

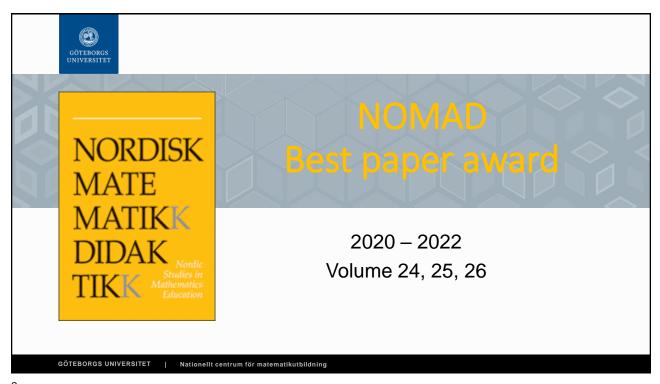
- (Re)submit papers by August 1
- Reviews and decisions by October 15
- Revised papers must be submitted by November 15
- All finally accepted papers will be handed over to publisher by December 1 and published digitally in the SMDF series

7

Practicalites

NC U≥

- * Toilets by the entrance to main hall and one floor down and up at same positions
- ❖ Servings in the morning and for the breaks are outside the main hall
- Two identical buffets for lunch in each end of the aula
- ❖ A disk with special diates ask for service
- Plenum sessions are filmed and made availabel including slides at www.matematikdidaktik.dk after the conference
- Please be flexible in you choice of parallel sessions if sessessions are occopied
- Presenters and chairs, please keep the time!
- ❖ If you need any special arrangement for your session, please ask for help
- ❖ Wear your name badge at the conference and put it in the pink box at the closing
- Please help cleen up after sessions
- ❖ Internet: eduroam or AU-Guest.





Articles in alphabetical order

Eriksson, I., Fred, J., Nordin, A.-K., Nyman, M. & Wettergren, S. (2021). Tasks, tools, and mediated actions – promoting collective theoretical work on algebraic expressions. *Nordic Studies in Mathematics Education*, *26*(3-4), 29–52.

Jankvist, U. T. & Niss, M. (2020). Fostering an intimate interplay between research and practice: Danish "maths counsellors" for upper secondary school. *Nordic Studies in Mathematics Education*, 25 (2), 99–118.

Nieminen, J. H. (2020). Student conceptions of assessment accommodations in university mathematics: an analysis of power. *Nordic Studies in Mathematics Education*, 25 (3-4), 27–49.

Wedin, A. (2021). Languaging in mathematics classrooms – space for students' varied language repertoires in the Language introduction program in Sweden. *Nordic Studies in Mathematics Education*, 26 (2), 67–85.

GÖTEBORGS UNIVERSITET

Nationellt centrum för matematikutbildning

11

And the winner is ...



Eriksson, I., Fred, J., Nordin, A.-K., Nyman, M. & Wettergren, S. (2021). Tasks, tools, and mediated actions – promoting collective theoretical work on algebraic expressions. *Nordic Studies in Mathematics Education*, *26*(3-4), 29–52.

A group of researchers at Stockholm University

Inger Erikson, Professor in education

Jenny Fred, Licentiate and PhD student

Anna-Karin Nordin, Licentiate and PhD student

Martin Nyman, Licentiate and PhD student

Sanna Wettergren, Dr.

GÖTEBORGS UNIVERSITET

Nationellt centrum för matematikutbildning

Welcome to the presentation of NOMAD on Thursday afternoon!

GÖTEBORGS UNIVERSITET

Nationellt centrum för matematikutbildning

13

Program for the opening ❖ Welcome at DPU by Head of department Helle Rørbech ❖ Welcome to NORMA 24 by the co-chairs Charlotte Krog Skott and Morten Blomhøj ❖ Presentation of NOMADs awards of best papers by Cecilia Kilhamn ❖ Two songs accompanied on piano by Birgitte Lundtoft

Kringsatt av fiender - Nordahl Grieg (1936)

NC U∑

- 1. Kringsatt av fiender,
 gå inn i din tid!
 Under en blodig storm vi dig til strid!
 Kanske du spør i angst,
 udekket, åpen:
 hvad skal jeg kjempe med,
 hvad er mitt våpen?
- 2. Her er dit vern mot vold,
 her er dit sverd:
 troen på livet vårt,
 menneskets verd.
 For all vår fremtids skyld,
 søk det og dyrk det,
 dø om du må men:
 øk det og styrk det!

15

Kringsatt av fiender - Nordahl Grieg (1936)



- 3. Stilt går granatenes
 glidende bånd.
 Stans deres drift mot død,
 stans dem med ånd!
 Krig er forakt for liv.
 Fred er å skape.
 Kast dine krefter inn:
 døden skal tape!
- 4. Elsk og berik med drøm alt stort, som var, Gå mot det ukjente, fravrist det svar. Ubygde kraftverker, ukjente stjerner skap dem, med skånet livs dristige hjerner.

Kringsatt av fiender - Nordahl Grieg (1936)

NC U≥

5. Edelt er mennesket, jorden er rik! Finnes her nød og sult, skyldes det svik. Knus det! I livets navn skal urett falle. Solskinn og brød og ånd eies av alle. 6. Da synker våpnene maktesløst ned. Skaper vi menneskeverd skaper vi fred. Den, som med høire arm bærer en byrde, dyr og umistelig, kan ikke myrde.

17

Kringsatt av fiender - Nordahl Grieg (1936)

NC U≥

fra bror til bror:
vi vil bli gode mot
menskenes jord.
Vi vil ta vare på
skjønnheten, varmen som om vi bar et barn
varsomt på armen!

7. Dette er løftet vårt

Here Comes the Sun – Beatles (1969)

NC UZ

Here comes the sun, doo-doo-doo

Here comes the sun, and I say

It's alright

Little darlin', it's been a long, cold, lonely winter

Little darlin', it feels like years since it's been here

Here comes the sun, doo-doo-doo

Here comes the sun, and I say

It's alright

Little darlin', the smile's returning to their faces

Little darlin', it seems like years since it's been here

Here comes the sun

Here comes the sun, and I say

It's alright

19

Here Comes the Sun – Beatles (1969)



Sun, sun, here it comes

Sun, sun, sun, here it comes

Sun, sun, here it comes

Sun, sun, here it comes

Sun, sun, sun, here it comes

Little darlin', I feel that ice is slowly melting

Little darlin', it seems like years since it's been clear

Here comes the sun, doo-doo-doo

Here comes the sun, and I say

It's alright

Here comes the sun, doo-doo-doo

Here comes the sun

It's alright

It's alright

NC U≥

Enjoy the conference



and contribute to its success!



