How to give a BAD presentation

(for a multi-disciplinary audience)

Marcus Reckermann (Thanks to Dennis Bray and Sebastian Wagner for invaluable inputs…)

International Baltic Earth Secretariat, Helmholtz-Zentrum Geesthacht, Germany

Baltic Earth
Earth System Science for the Baltic Sea Region

Helmholtz-Zentrum Geesthacht
Centre for Materials and Coastal Research

How to give a BAD presentation

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Attitude, appearance and body language …

- Be humble and shy
- Speak so quietly that only the two front rows can understand what you are saying
- If you have a microphone, do not speak into it
- Speak towards the screen, do not face or even look at the audience
- Do not speak freely, rather read from slides word by word, or from a cheat slip
- Speak without intonation
- Do not smile or make jokes or tell anecdotes (this is serious business)
- Do not adjust your presentation according to the audience, i.e. if you have a multidisciplinary audience (biologists, meteorologists)!

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Slides…

„In silico exploration of the fructose-6-phosphate phosphorylation step in glycolysis: genomic evidence of the coexistence of an atypical ATP-dependent along with a PPi-dependent phosphofructokinase in Propionibacterium freudenreichii subsp. shermanii“

- Choose your presentation title as long and cryptic as possible
- Do not explain terms which may not be known to the audience!
- Never use a common term if you can use an expert term meaning exactly the same

baroclinic

Redfield ratio

diapycnical

barotrophic

Alkalinity

Reanalysis

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Slides…

NO_x

- Use as many acronyms and abbreviations as possible (even if you could easily use the full term)!
- Explain aconyms/abbreviations only once (if at all)

NCEP-CFSR

SLP

WRTDS

JJA

ERA40

WRF

NEMO-WAM

CLM

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Slides…

- Use as many formulas as possible

$$f\ (x) = \frac{1}{\hat{a}} e\left[- \frac{x - \hat{b}}{\hat{a}} - e\left(- \frac{x - \hat{b}}{a} \right) \right]$$

- Do not explain the formulas you use because it goes without saying that everyone in the audience knows them
- If your data produce an arbitrary cloud of points, draw a straight line through it and state it is „statistically significant“. Base this on the easiest statistical test you can find in the internet, and do not care if this is applicable to your type of data or not.
- Use long text slides as much as possible

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What is Baltic Earth?

Baltic Earth stands for the vision to achieve an improved Earth system understanding of the Baltic Sea region. This means that the research disciplines of BALTEX continue to be relevant, but a more holistic view of the Earth system encompassing processes in the atmosphere, on land and in the sea as well as in the antroposphere shall gain in importance in Baltic Earth relative to BALTEX. Specific grand research challenges represent interdisciplinary research questions to be tackled by the new programme in the coming years. A major means will be scientific assessments of particluar research topics by expert groups, similar to the BACC approach, which shall help to identify gaps and inconsistencies in the current knowledge. The continuity in basic research fields, structure (secretariat, conferences, publications) and the network (people and institutions) is symbolised by the clearly recognizable logo, being very similar to the BALTEX logo, but still distinctly different.

A science plan is currently in preparation. The intention is to respond flexibly to a continuously on-going definition of core research questions which are identified to be key scientific issues, so-called Grand Challenges for research. These will be identified at conferences and by assessing existing knowledge in a specific research field by dedicated working groups (following the BACC approach). Research foci are planned for periods of about 3-4 years. Baltic Earth will communicate with stakeholders and research funding agencies to promote funding relevant for the Grand Challenges.

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Slides…

- Switch between slides quicker than they can be read/understood
- Give the audience the feeling that it is THEIR fault if they don´t understand your slides
- Include avaiodabe mistaks (e.g. spelling, grammar, etc.), this show how busy you are and that you have no time for this trivial thinngs like correct spelling etc.
- Generally, have your slides completely overloaded with information („this is a very busy slide, but…“)

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Baltic Earth Science Plan and Grand Challenges

- Flexible science plan with a continuously on-going definition of core research questions which are identified to be key scientific issues, so-called "**Grand Challenges**" (GCs)
- New Grand Challenges will be identified at conferences and by using **assessments of existing research** by dedicated working groups. Grand Challenges are envisaged to be research foci for periods of about 3-4 years (then terminated or updated)
- The new programme will **communicate** with **stakeholders** and research funding **agencies** to promote funding relevant for the Grand Challenges
- **International embedment** (GEWEX, Future Earth)

Current Grand Challenges

- GC1: **Salinity dynamics** in the Baltic Sea
- GC2: **Land-Sea biogeochemical feedbacks** in the Baltic Sea region
- GC3: **Natural hazards and extreme events** in the Baltic Sea region
- GC4: Understanding **sea level dynamics** in the Baltic Sea
- GC5: Understanding **regional variability of water and energy exchanges**

- The **human impact** will be assessed at all levels, wherever possible
- Website: www.baltic-earth.eu

Baltic Earth Infrastructure

- International BALTEX Secretariat continues as **International Baltic Earth Secretariat**
- **Baltic Earth Science Steering Group (BESSG)** installed as of June 2014
- **Baltic Earth Science Plan** to be finalized in late 2014
- **BESSG members**: Excellent, active "young" scientists; country balance, gender balance, discipline balance, institutional balance
- **Working Groups** installed for each GC, plus
  - WG on Outreach and Communication
  - WG on Education
  - WG on the Utility of Regional Climate Models (BALTEX inherited)
  - WG on the Assessment of Scenario Simulations for the Baltic Sea 1960-2100 (BALTEX inherited)
- **Senior Advisory Board**

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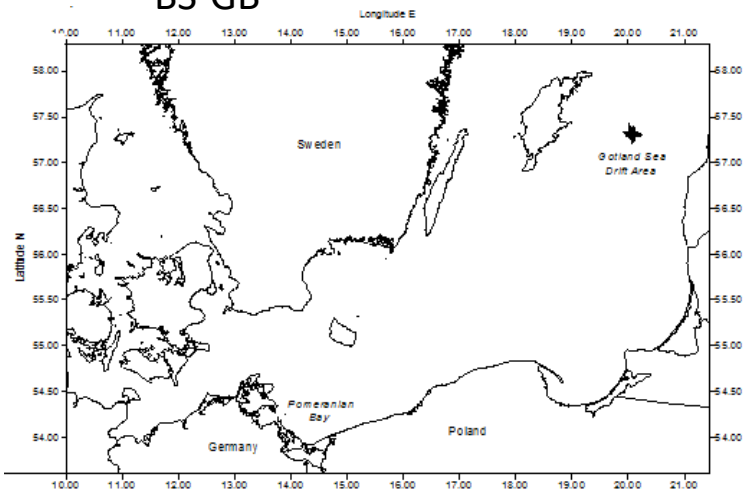
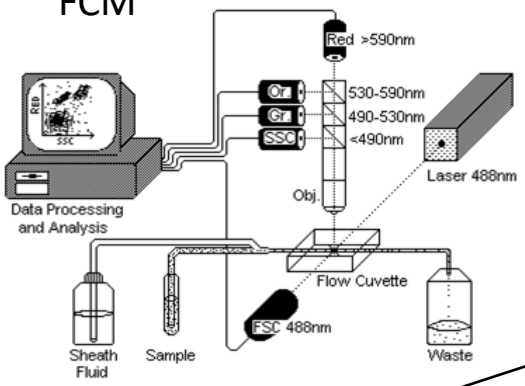
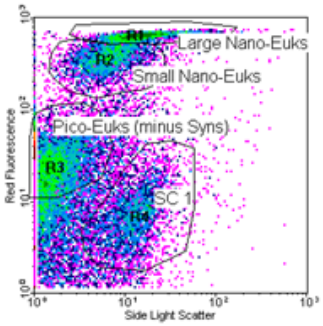
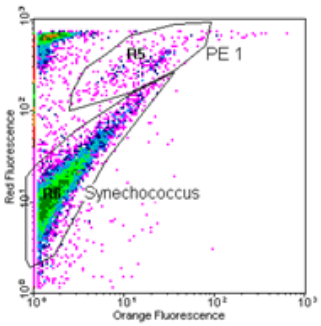
BS-GB



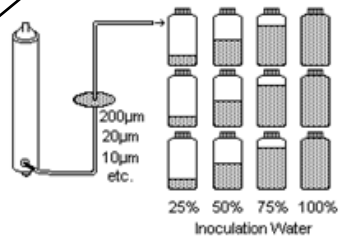
FCM

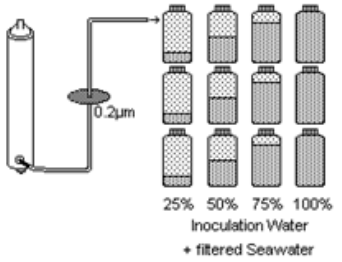






Dil. Exp.

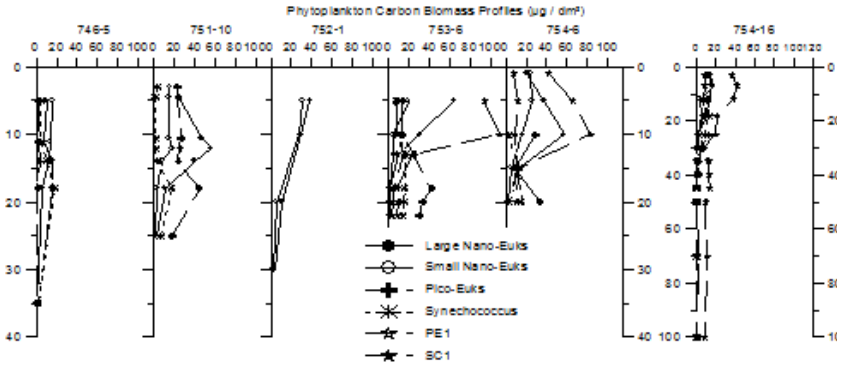




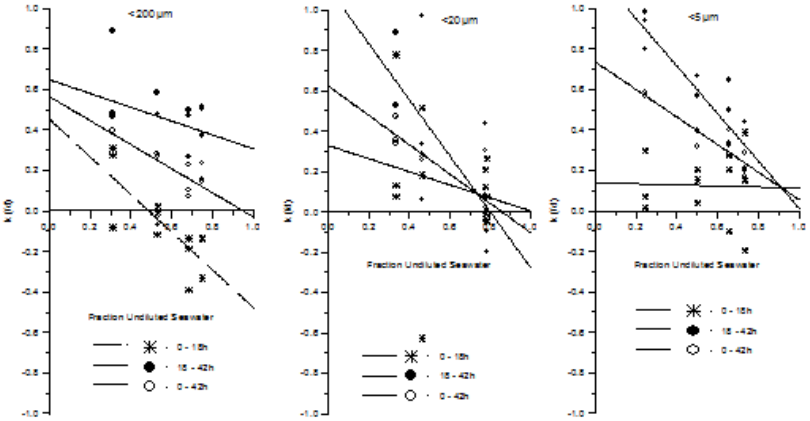
Tab.10 Results of size fractionated dilution grazing experiments from the Gotland Sea in July 1994.

Exp.	Stat.	Grazer Size Class	N t0	Grazing g (/d)	Growth µ (/d)	r	Stock grazed % / d	Prod. grazed % / d	Cells grazed # / cm³ * d	Phyto-C grazed mg / m³ * d
Synechococcus										
1	747	<200µm	811,715	0.341	0.257	0.274	29	133	234,538	57.72
1	747	<20µm	660,464	1.205	1.588	0.675	70	76	462,528	113.82
1	747	<5µm	783,481	1.171	1.522	0.877	69	77	540,557	133.03
2	751	<200µm	215,838	1.256	0.873	0.675	72	144	154,369	37.99
2	751	<20µm	190,364	1.189	0.572	0.866	70	208	132,393	32.58
2	751	<5µm	166,760	1.014	0.899	0.827	64	113	105,628	25.99
3	752	<200µm	127,891	0.955	1.172	0.669	62	81	78,677	19.36
3	752	<20µm	151,888	-0.362	-0.290	0.529	-	-	-	-
3	752	<5µm	137,250	1.270	0.670	0.481	72	190	98,706	24.29
Pico-Eukaryotes										
2	751	<200µm	11,370	1.015	1.164	0.751	64	87	7,249	10.93
2	751	<20µm	8,270	-0.426	-0.282	0.260	-	-	-	-
2	751	<5µm	7,598	0.704	0.945	0.798	51	74	3,840	5.79
3	752	<200µm	4,179	0.315	0.647	0.465	27	49	1,129	1.70
3	752	<20µm	4,461	-0.014	0.038	0.023	-	-	-	-
3	752	<5µm	3,540	0.143	0.362	0.205	13	41	472	0.71
Small Nano-Eukaryotes										
2	751	<200µm	9,427	0.743	-0.134	0.781	52	-	4,943	25.16
2	751	<20µm	5,595	-0.025	-0.399	0.036	-	-	-	-
2	751	<5µm	5,389	0.118	-0.444	0.168	11	-	600	3.05
3	752	<200µm	7,828	0.722	1.091	0.829	51	66	4,025	20.49
3	752	<20µm	8,260	0.779	0.995	0.841	54	78	4,470	22.75
3	752	<5µm	5,185	0.864	0.718	0.683	58	120	3,000	15.27
Large Nano-Eukaryotes										
2	751	<200µm	4,471	0.542	-0.594	0.669	42	-	1,871	44.08
2	751	<20µm	5,329	0.280	-0.895	0.153	24	-	1,301	30.66
2	751	<5µm	4,515	0.303	-2.267	0.420	26	-	1,180	27.81
PE1										
3	752	<200µm	1,154	0.985	1.006	0.868	63	98	723	17.04
3	752	<20µm	1,000	0.452	0.996	0.163	36	45	364	8.57
3	752	<5µm	630	0.806	0.150	0.916	55	537	349	8.21

FCM
Abds.
WCPs



Experiment 1 (St.747)



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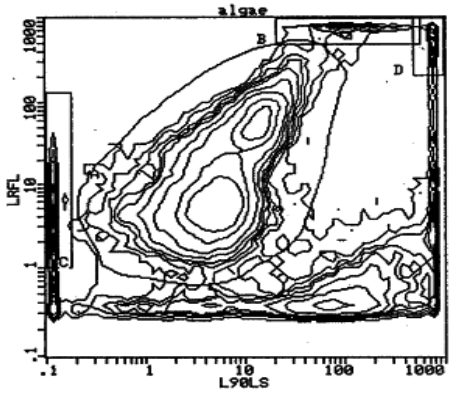

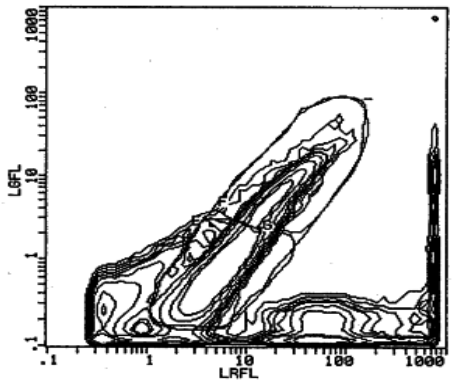

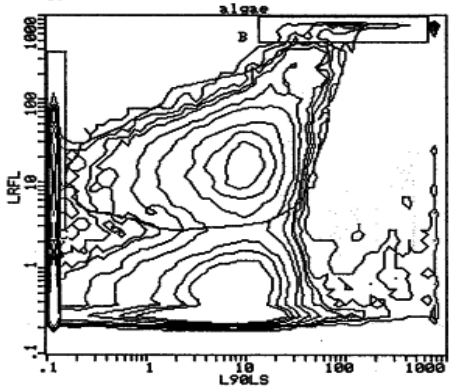

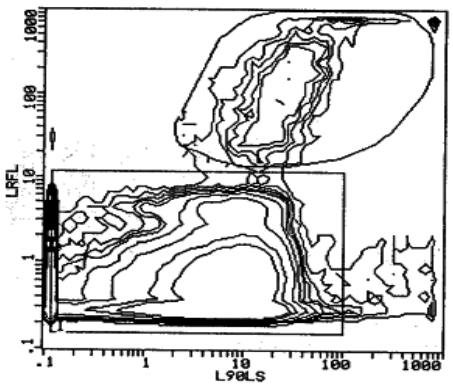

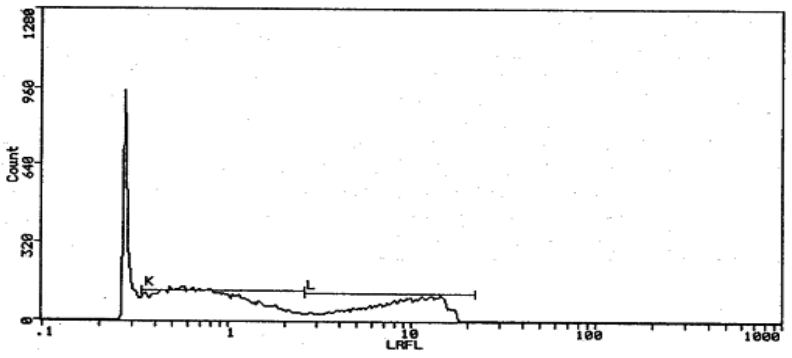

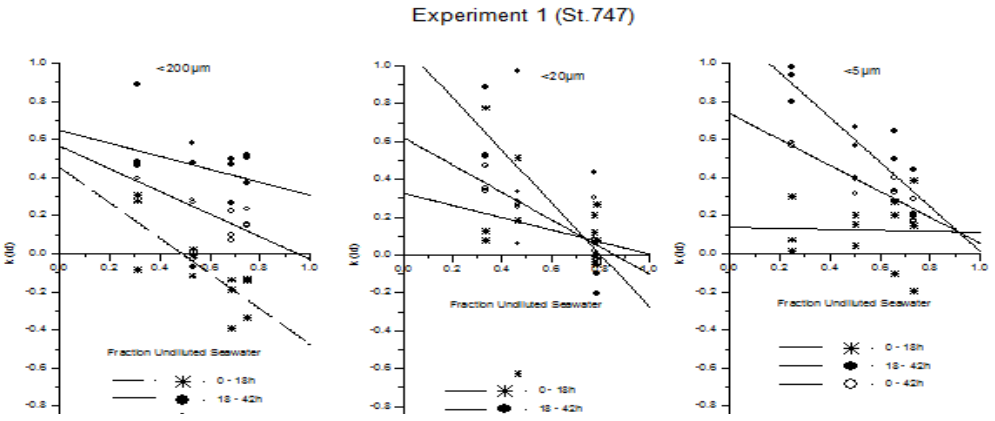

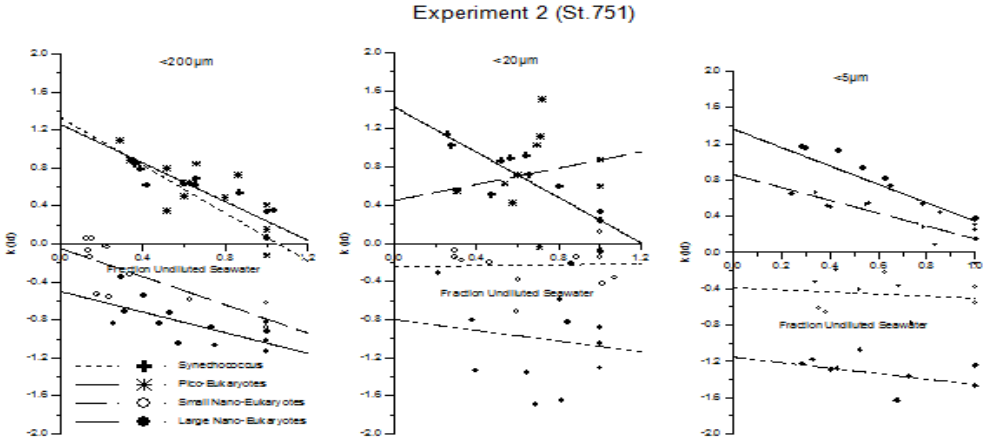

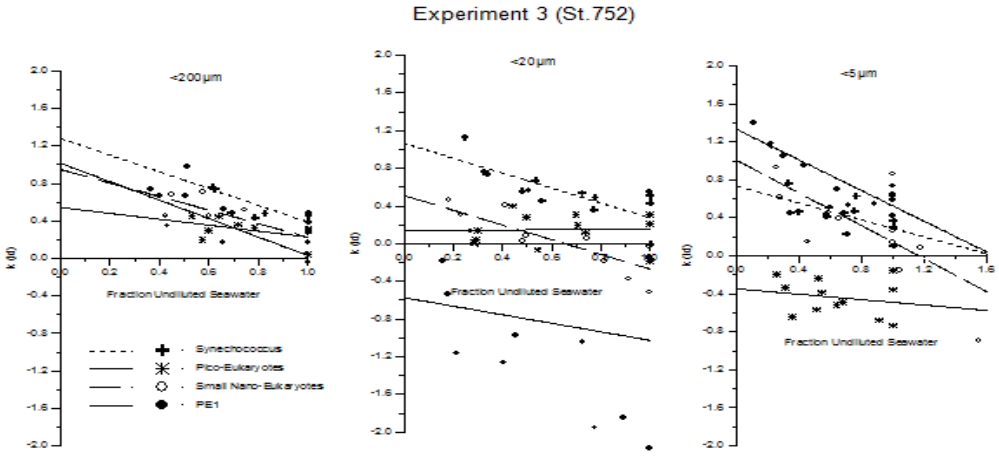

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Figures and tables…

- If possible show large and complex tables with many numbers

Tab. 10 Results of size fractionated dilution grazing experiments from the Gotland Sea in July 1994.

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Figures and tables…

- If you use a published figure or one from another author, never cite or give credits, because after you want to earn the credit yourself (or you just have no time for these trivial things)
- Same for acknowledgments…

- Be surprised or ignorant of your own slides (… you´re just too busy…)

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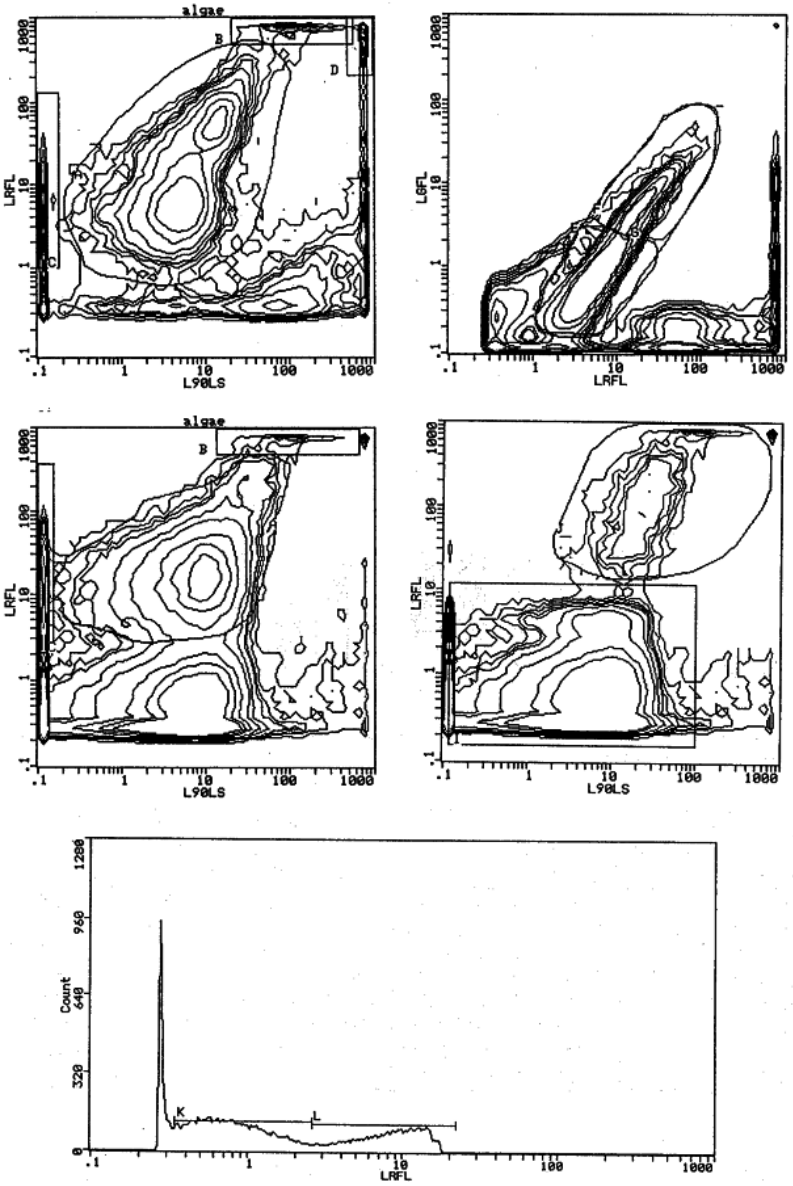

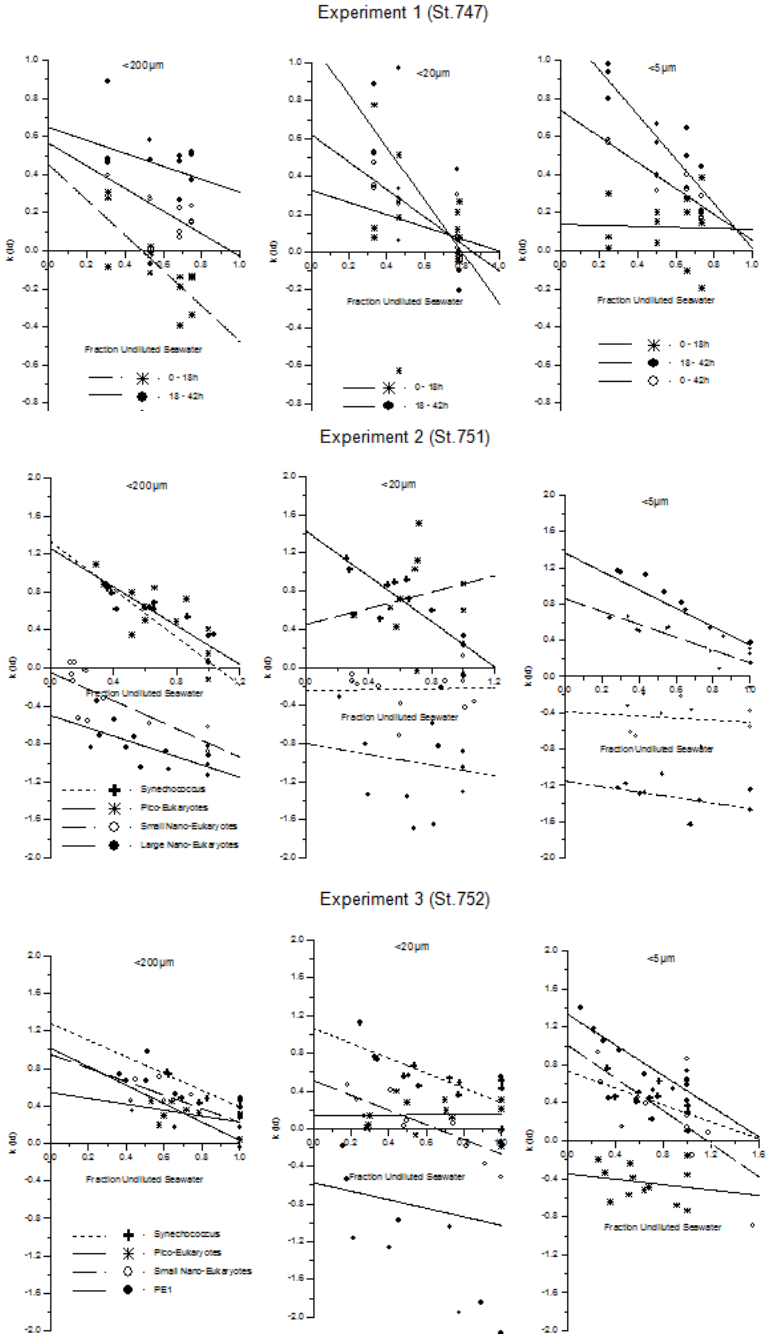

www.baltic-ear

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Some general hints …

- Do not upload your presentation in advance
- Do not check well beforehand using the presentation hardware whether animations or videos work, especially if you are an Apple user
- Always consider that you have enough time for your presentation, i.e. show up with 50 slides if you have 10 minutes. After all you want to tell your complete story and what do you care about the time schedule
- Somewhere during your presentation, ask the chair „How much time do I have?“, best just after your introduction, and when you have 3 minutes left
- Often start a statement with „As you know…“ because you can rightly expect that the audience knows everything in advance what you want to tell them
- Never put your work/results into a greater context, because the audience must find out themselves (apart from that, you do not know yourself and who cares)
- Have at least 3 slides of conclusions, with 10 bullet points each
- Just be as boring as possible…

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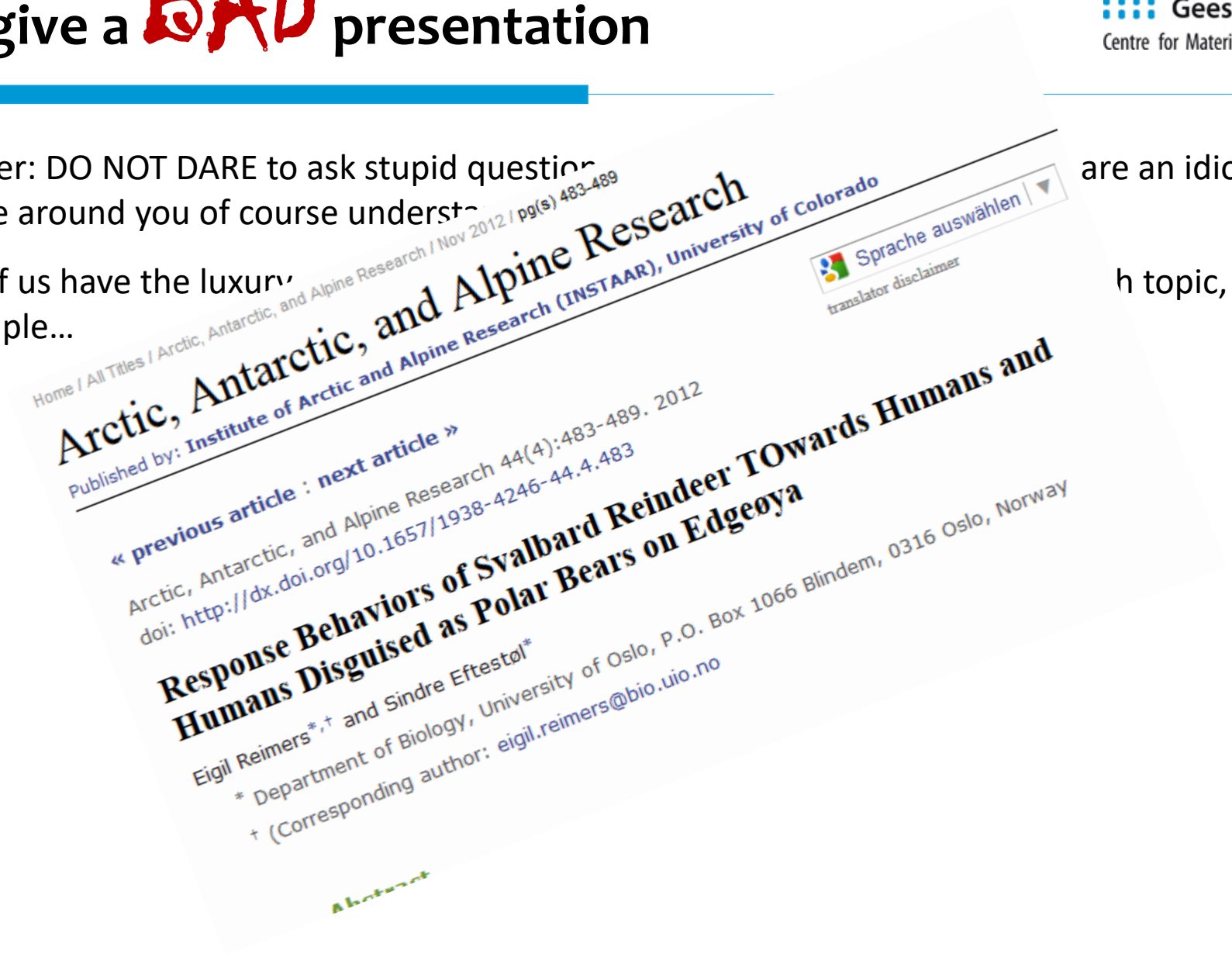
- As listener: DO NOT DARE to ask stupid questio… are an idiot…
  Everyone around you of course understa…
- Not all of us have the luxury … h topic,
  for example…