

RHIC/AGS UEC Meeting

Sevil Salur

Nov 15, 2019

UEC Guest



Professor Berndt O. Mueller,
Associate Laboratory Director for Nuclear & Particle Physics
*James B. Duke Professor and Director of the Center for Theoretical
and Mathematical Sciences at Duke University.*

Education: PhD Goethe Universität, Frankfurt (1973).

Professional Experience: Duke University: Dean of the Natural Sciences & Physics
Department Chair,

Goethe Universität: Associate Professor (C3)

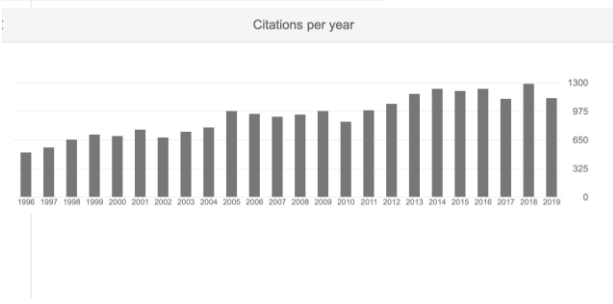
University of Washington, Yale University & Goethe Universität: Research Associate,

Awards: 2007 Jesse Beams Award, American Physical Society (SE Section)

- 1998 Senior U.S. Scientist Award, A. v. Humboldt Foundation
- 1994 Fellow, American Association for the Advancement of Science
- 1994 Fellow, American Physical Society
- 1975 Rontgen Prize, Universität Giessen, Germany

A wealth of scientific accomplishments

TITLE	CITED BY	YEAR
Strangeness production in the quark-gluon plasma J Rafelski, B Müller Physical Review Letters 48 (16), 1066	1652	1982
Strangeness in relativistic heavy ion collisions P Koch, B Müller, J Rafelski Physics Reports 142 (4), 167-262	1458	1986
Quantum Electrodynamics of Strong Fields W Greiner, B Muller, J Rafelski Springer: http://www.springer.com/us/book/9783642822742	1269	1985
Neural networks: an introduction B Müller, J Reinhardt, MT Strickland Springer Science & Business Media	1013	2012
Hadronization in heavy-ion collisions: recombination and fragmentation of partons RJ Fries, B Müller, C Nonaka, SA Bass Physical Review Letters 90 (20), 202303	889	2003
Hadron production in heavy ion collisions: Fragmentation and recombination from a dense parton phase RJ Fries, B Müller, C Nonaka, SA Bass Physical Review C 68 (4), 044902	809	2003
The casimir effect G Plunien, B Müller, W Greiner Physics Reports 134 (2-3), 87-193	793	1986
The search for the quark-gluon plasma JW Harris, B Müller Annual Review of Nuclear and Particle Science 46 (1), 71-107	568	1996
Fluctuation probes of quark deconfinement M Asakawa, U Heinz, B Müller Physical Review Letters 85 (10), 2072	538	2000
Electron-ion collider: The next QCD frontier A Accardi, JL Albacete, M Anselmino, N Armesto, EC Aschenauer, ... The European Physical Journal A 52 (9), 268	535	2016
Dynamics of parton cascades in highly relativistic nuclear collisions K Geiger, B Müller Nuclear Physics B 369 (3), 600-654	532	1992



	All	Since 2014
Citations	28488	7188
h-index	77	35
i10-index	307	120

MCO: Meetings, **Communication** & Outreach

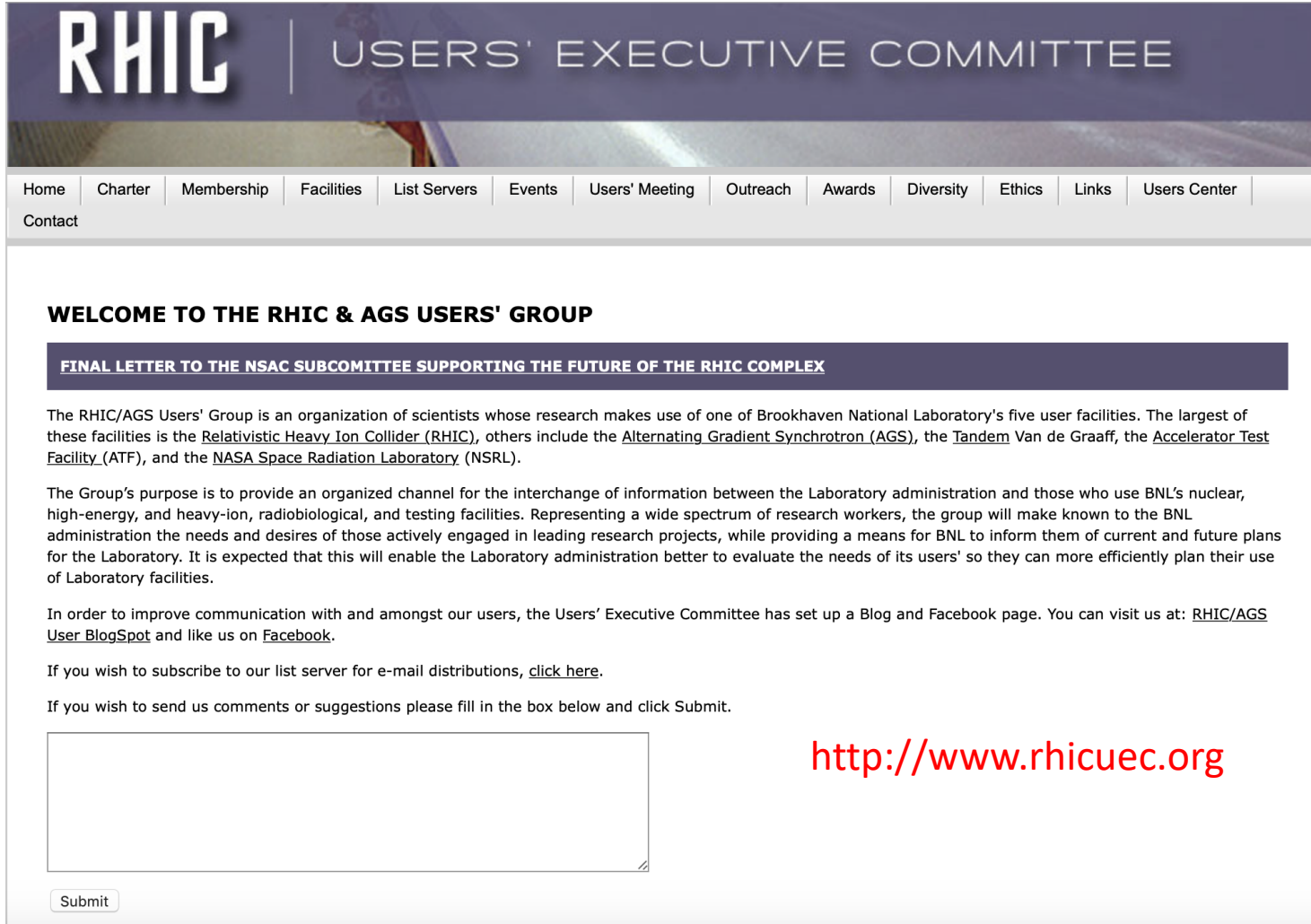
Minutes of our monthly meetings:

- For Asian Colleagues and the members who cannot be accommodated – new doodle form will be circulated early December for 2020 meetings.
- Next UEC meeting is 12/13/2019
- Meeting Minutes is posted on the event sites:
- <http://www.rhiculturec.org/events.aspx>
- Volunteers for minutes?

MCO: Meetings, Communication & Outreach

Anonymous suggestion from users:

- Input box in the UEC website (Thank you to Kelly!)



The screenshot shows the homepage of the RHIC Users' Executive Committee website. The header features the RHIC logo and the text "USERS' EXECUTIVE COMMITTEE". Below the header is a navigation menu with links: Home, Charter, Membership, Facilities, List Servers, Events, Users' Meeting, Outreach, Awards, Diversity, Ethics, Links, Users Center, and Contact. The main content area has a heading "WELCOME TO THE RHIC & AGS USERS' GROUP" and a subheading "FINAL LETTER TO THE NSAC SUBCOMMITTEE SUPPORTING THE FUTURE OF THE RHIC COMPLEX". The text describes the RHIC/AGS Users' Group and its purpose. It also mentions a blog and Facebook page. At the bottom, there is a text input box for comments and a "Submit" button.

RHIC | USERS' EXECUTIVE COMMITTEE

Home | Charter | Membership | Facilities | List Servers | Events | Users' Meeting | Outreach | Awards | Diversity | Ethics | Links | Users Center | Contact

WELCOME TO THE RHIC & AGS USERS' GROUP

FINAL LETTER TO THE NSAC SUBCOMMITTEE SUPPORTING THE FUTURE OF THE RHIC COMPLEX

The RHIC/AGS Users' Group is an organization of scientists whose research makes use of one of Brookhaven National Laboratory's five user facilities. The largest of these facilities is the Relativistic Heavy Ion Collider (RHIC), others include the Alternating Gradient Synchrotron (AGS), the Tandem Van de Graaff, the Accelerator Test Facility (ATF), and the NASA Space Radiation Laboratory (NSRL).

The Group's purpose is to provide an organized channel for the interchange of information between the Laboratory administration and those who use BNL's nuclear, high-energy, and heavy-ion, radiobiological, and testing facilities. Representing a wide spectrum of research workers, the group will make known to the BNL administration the needs and desires of those actively engaged in leading research projects, while providing a means for BNL to inform them of current and future plans for the Laboratory. It is expected that this will enable the Laboratory administration better to evaluate the needs of its users' so they can more efficiently plan their use of Laboratory facilities.

In order to improve communication with and amongst our users, the Users' Executive Committee has set up a Blog and Facebook page. You can visit us at: [RHIC/AGS User BlogSpot](#) and like us on [Facebook](#).

If you wish to subscribe to our list server for e-mail distributions, [click here](#).

If you wish to send us comments or suggestions please fill in the box below and click Submit.

Submit

<http://www.rhicuec.org>

MCO: Meetings, Communication & Outreach

- Successful Organization of Open Forum at the DNP, Tuesday Oct 15, 2019

WHERE
Arlington, Virginia
Crystal Gateway Marriott
Salon 1

**RHIC & AGS Users' Group
Open Forum Meeting and Reception**

TIME
Light Refreshments at 6:15 p.m.

DATE
Tuesday, October 15, 2019

GUEST SPEAKERS
sPHENIX— David Morrison - Brookhaven National Laboratory
EIC - Berndt Mueller - Brookhaven National Laboratory
STAR - Carl Gagliardi - Texas A&M University
PHENIX— Julia Velkovska - Vanderbilt University

AGENDA

Indico: <https://indico.bnl.gov/event/6933/>
Reception provided courtesy of Brookhaven Science Associates

Contact: Ron Belmont RHIC/AGS Users' Executive Committee— belmonrj@gmail.com

Thank you Ron!
And thank you Kelly for all the
administrative help!

MCO: Meetings, Communication & Outreach

- Ron Belmont
- Users Meeting June 9-12, 2020, “20 years of RHIC”

***Hard Probes June 1-6, 2020 – Austin**

MCO: Meetings, Communication & Outreach

- Thesis Awards (chaired by outgoing chair Rosi Reed)
- Merit Awards (Megan Connors, Matt Sievert, Oleg Eyser & myself)
- DNP/APS committees & Awards (chaired by Frank Geurts, Justin Frantz, Peter Petreczky, Jaki Noronha Hostler)

Committee for Merit Awards are formed and we'll try to schedule a meeting later this month.

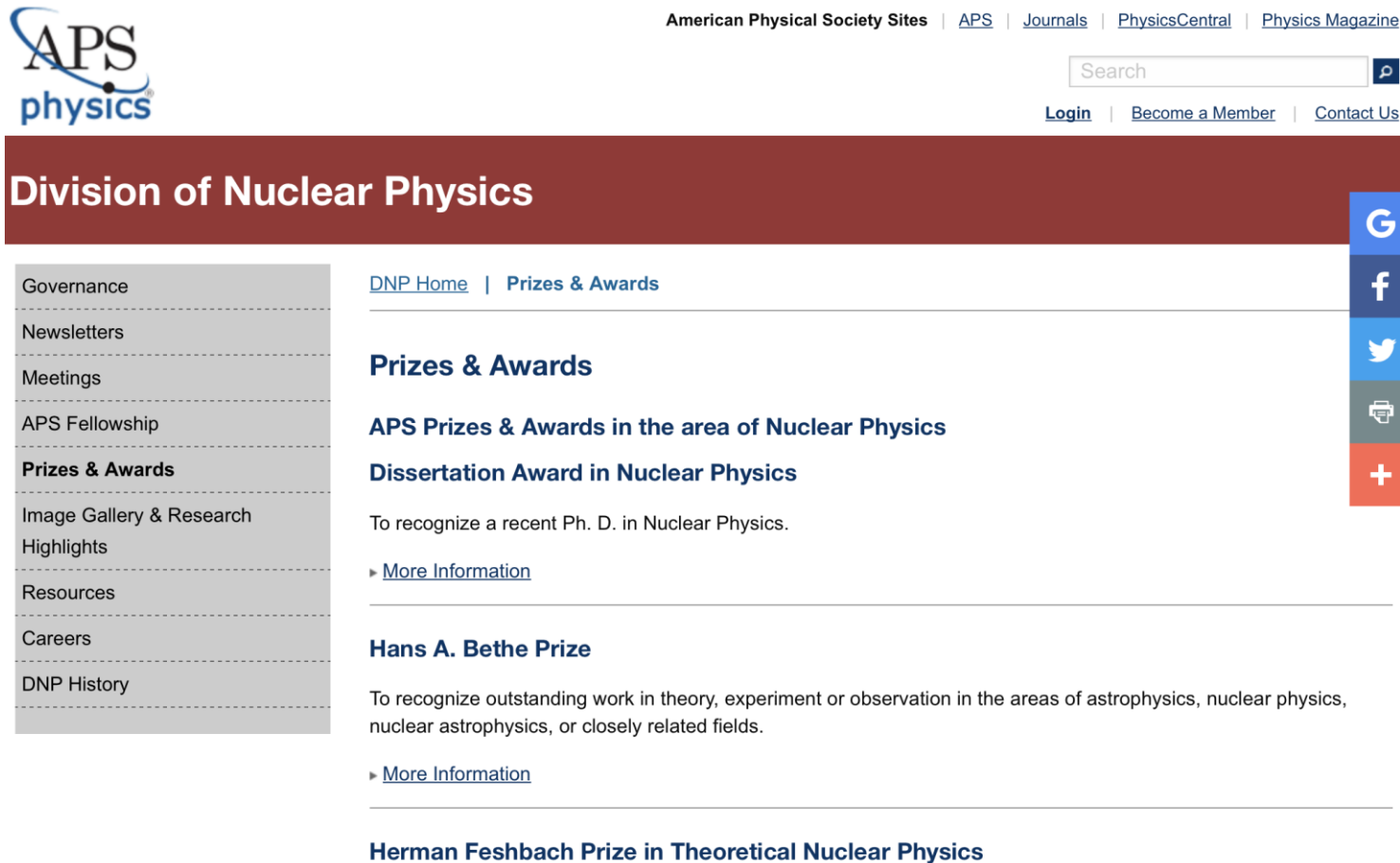
Thesis Awards

- Rosi

DNP/APS Committees and Awards

- Frank Geurts:

Recommendations for committees, awards within APS and DNP



The screenshot shows the APS Division of Nuclear Physics website. At the top, the APS physics logo is on the left, and navigation links for American Physical Society Sites, APS, Journals, PhysicsCentral, and Physics Magazine are on the right. A search bar and links for Login, Become a Member, and Contact Us are also present. A dark red banner reads "Division of Nuclear Physics". On the left is a vertical menu with links: Governance, Newsletters, Meetings, APS Fellowship, Prizes & Awards (highlighted), Image Gallery & Research Highlights, Resources, Careers, and DNP History. The main content area is titled "DNP Home | Prizes & Awards" and "Prizes & Awards". It features the heading "APS Prizes & Awards in the area of Nuclear Physics" and "Dissertation Award in Nuclear Physics". Below this, it states "To recognize a recent Ph. D. in Nuclear Physics." and includes a link for "More Information". Further down, it lists the "Hans A. Bethe Prize" with the description "To recognize outstanding work in theory, experiment or observation in the areas of astrophysics, nuclear physics, nuclear astrophysics, or closely related fields." and another "More Information" link. At the bottom, it mentions the "Herman Feshbach Prize in Theoretical Nuclear Physics". On the right side of the page, there is a vertical stack of social media icons for Google+, Facebook, Twitter, a printer icon, and a plus sign for more options.

APS physics

American Physical Society Sites | [APS](#) | [Journals](#) | [PhysicsCentral](#) | [Physics Magazine](#)

Search

[Login](#) | [Become a Member](#) | [Contact Us](#)

Division of Nuclear Physics

- Governance
- Newsletters
- Meetings
- APS Fellowship
- Prizes & Awards**
- Image Gallery & Research Highlights
- Resources
- Careers
- DNP History

[DNP Home](#) | [Prizes & Awards](#)

Prizes & Awards

APS Prizes & Awards in the area of Nuclear Physics

Dissertation Award in Nuclear Physics

To recognize a recent Ph. D. in Nuclear Physics.

► [More Information](#)

Hans A. Bethe Prize

To recognize outstanding work in theory, experiment or observation in the areas of astrophysics, nuclear physics, nuclear astrophysics, or closely related fields.

► [More Information](#)

Herman Feshbach Prize in Theoretical Nuclear Physics

Most of the Deadlines for Nominations: early June,

APS Fellowship Nomination Deadline: **Wednesday, May 1, 2019**

MCO: Meetings, Communication & Outreach

- Representation & Diversity in Physics

FPP: Nuclear Physics DC Day

Nuclear Physics DC Day

2019 Nuclear Physics Day

Updates

Meeting Materials

Capitol Hill Info



A webpage or listserv to sign in the interested parties non-governmental email addresses, especially for BNL employees – Kelly is working on it.

QOL: Quality of Life

- Rosi Reed

SAS: Site Access / Science

- Kathy Nasta

Exceptions can be provided for citizens of blacklisted countries (i.e. "open meetings" like our Users' Meeting possibly allow for examples our Russian colleagues to attend.)

- Collaboration meetings, however, do not fall under that category.
- Can we seek exemptions for collaboration meetings?
- Can we seek exemptions during RHIC operations, e.g. allow Russian colleagues to participate in the shift taking?

Privacy of the international members: instead of email, can the users submit their scans of their passports and other important documents in a secure way instead of email, possibly a webform?

Working Groups

Meetings, Communications and Outreach:

- AUM, DNP, open forums, etc.

Quality of Life:

- Food (especially access to food at odd hours), Housing, Transportation, Day Care (or lack there-of), etc.

Funding, Politics and Programmatic:

- Washington DC trip, Petitions, Letters, etc.

Site Access and Science:

- Badging, training, the EIC, etc.

Some ideas on the AUM

Ron B.

University of North Carolina at Greensboro

November 14, 2019

A few notes

- Reminder: Tuesday June 9 through Friday June 12, 2020
 - Friday the 12th coincides with the exact 20th anniversary of the first RHIC collisions
- Some good community input on conference swag to help commemorate the special occasion
 - Mugs, t-shirts, stuff like that
 - Need to determine what kind of cost this might incur, how we'd pay for it, etc
- Allena Opper, Jim Thomas, Tim Hallman, and Richard Witt have all been notified of the meeting dates
- I notified Lorelei at JLab of our meeting date back in September but have not followed up yet
- Berndt will talk to Frank Wilczek and Gerardus 't Hooft to see if either would be willing to speak

Scheduling needs and constraints

- The DOE and NSF talks will be scheduled for whenever the speakers are available
- If we get a Nobel Prize winner, we will likely have to take that same approach
- In addition to 20 years of RHIC, we are celebrating 70 years of AGS and 100 years of Ernest Courant
 - Paul Courant and Larry Jones would both speak about him
 - Thomas Roser suggested a half day about Ernest and strong focusing
 - I think that might be a bit much, but we'll consider it for now...
- Given the special nature of the 2020 AUM, we probably need 3 days of plenary talks instead of 2
 - This was last done in 2017
- Given both the importance of the diversity+career workshop **and** our big success with it, I think we want to make sure it's still prominent

Scheduling needs and constraints

- The 2020 AUM will obviously have a strong component celebrating our history, but we also want to focus on present and future efforts as well
- EIC physics, both theory and machine development are important
- sPHENIX is important, and I propose we at least consider promoting sPHENIX from one talk to two
- RHIC status and plans, STAR status and plans should be presented
- Physics highlights from STAR and PHENIX should be presented
- As part of the retrospective, I think we want “greatest hits” talks from representatives of all four RHIC experiments if possible
 - It will be easy to find STAR and PHENIX people for this
 - It might take a little effort to identify people to talk about PHOBOS and BRAHMS

Very rough draft of 2020 plenary schedule

I cannot stress this enough, comments are welcome!!!

I fully acknowledge that theory and cold QCD are underrepresented here

In addition to an additional day of plenaries, Friday may have to become a full day, contrasted with previous years

Ernest I	Welcome (Doon)	The next 20 years of RHIC (Berndt)
Ernest II	20 years of RHIC theory	STAR upgrades
Strong focusing	20 years of BRAHMS	sPHENIX status
Other AGS I	20 years of PHENIX	sPHENIX physics
Other AGS II	20 years of PHOBOS	EIC detectors and accelerator
Other AGS III	20 years of STAR	EIC theory
Diversity I	20 years of RHIC machine	Awards, flash, etc
Diversity II	CAD Run20 report	Discovery Park and/or food
Diversity III	STAR Run20 report	Business & elections
Career I	STAR highlights	
Career II	PHENIX highlights	
D+C panel discussion		

Extra material

Schedule for previous AUMs

2017

Wednesday	Thursday	Friday
RHICf	Welcome (Doon)	STAR upgrades
Spin	RHIC future (Berndt)	sPHENIX
EIC theory	HI theory	EIC machine
CGC small systems	PHENIX highlights	EIC physics
BES small systems	STAR highlights	EIC NAS review
BES large systems	RHIC status	Poster Award
jets	CAD Run17 report	Discovery Park
proton shape	NSRL report	Business & elections
lattice	detector physics	
HF thoery	70 years of accelerators	
HF experiment	AGS to EIC	
CME theory	report from NSF	
	report from DOE	
	thesis awards	
	flash talks	

Schedule for previous AUMs

2018

Thursday	Friday
Welcome (Doon)	Report from DOE
RHIC future (Berndt)	Report from NSF
CAD Run18 report	STAR upgrades
LEReC	EIC NAS review
JETSCAPE	Cold QCD
BEST	Poster Award
PHENIX highlights	Business & elections
STAR highlights	
thesis award	
flash talks	
new awards	

Schedule for previous AUMs

2019

Thursday	Friday
Welcome (Doon)	Cold QCD
Roy Glauber	EIC
RHIC future (Berndt)	STAR upgrades
sPHENIX	Merit & poster awards
Report from NSF	Poster flash talk
Topics from ONP	Discovery Park
Thesis Awards	Food Services
CAD Run19 report	Business & elections
LEReC	
STAR Run19 report	
STAR highlights	
PHENIX highlights	
report from DOE	