



## IN THIS ISSUE

- Winter at SchoolNova -Page 1
- Academic Competitions - Page 2
- First CafeNova of 2020



## UPCOMING EVENTS

- Competitions - on Page 2
- Spring Concert -coming soon
- CafeNova -Date TBA
- Math Festival -Date TBA

## THE SEASON OF CELEBRATION

Together, we graciously said farewell to the outgoing 2019 year and welcomed the new 2020!

As at a turn of a page, the end of a calendar year always brings the opportunity for reflections and prompts us to bring many of our tasks to completion for a well-deserved sense of accomplishment. After all, the new endeavors are awaiting with the



start of the coming year! All of it was true for SchoolNova. We were proud of the progress we had made, grateful to be joined by the new faculty and energized for our new pursuits.

We got together for a Faculty Party on December 15th to celebrate! Big Thank You to all our Staff!



On January 11th, the basement of Math building transformed into a magical winter scenery, filled with decorations and festivities, culinary treats, music and a fantastic mood. A happy gathering of SchoolNova families and a visit by Father Frost and Snow Maiden left a lasting impression and a profound sense of joy. We are grateful to all volunteers, who helped this transformation!



### On January 11th,2020 Russian Theater-Studio "Dragonfly"

treated us to another remarkable performance. This time they presented "Pippi Longstocking", a play based on Astrid Lindgren's novel, adapted by Yuli Kim. The truly exceptional cast of performers once again captivated us with their talent, hard work and contagious merriment.

Much of the success of the Studio is owed to the phenomenal directing by Nadezhda Shavarina.

Kudos to "Dragonfly"!

### Art Exhibit

by our SchoolNova students is one of the highlights of our celebration. This year, the artwork is inspired by the traditional styles and techniques from around the world. The work on display featured inspiration from Indian Gond Art and traditional weaving.



\*Photos by Natalia Ilina, Green Ray Studio



## SCHOOLNOVA HOSTS COMPETITIONS

–“There is nothing like a good competition to push you even further. Embrace competition - you might surprise yourself!”

The most immediate value of academic contests is obvious—they pique students’ interest in the subject and encourage them to value intellectual pursuits.

For many, participation in academic tournaments has become a personal tradition, to some - it’s a measure of achievement on the scale of individual scholastic ambition, to others - simply a meaningful way to challenge their mind and progressively push it’s limits. Either way, each event is a fascinating gathering of students of like interests, abilities and kindred spirits, eagerly embracing the challenge every time.

SchoolNova recognizes the value of this rewarding pursuit and offers an opportunity to take part in 7 various yearly competitions by hosting them right here, at our SBU location.

Congratulations to all participants of the completed contests:

[AMC 8](#) took place on November 12, 2019. More than 55 students from SchoolNova and local community participated.

[F=ma](#) Physics exam was on Jan 23, 2020

[AMC10/12B](#) took place on Feb 5, 2020



Academic competitions bring together students of like interests, abilities and kindred spirits, allowing them to form their own community

Our heartfelt thanks to A. Kirillov, A. Abanov, S. Suchalkin and SBU Mathematics Dept. and SBU Dept. of Physics and Astronomy for co-hosting the competitions with SchoolNova at Stony Brook.

### MARK THE DATES FOR UPCOMING CONTESTS:

March						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

#### Le Grand Concours:

(the annual national French contest):

FLES - Sunday, March 1st, 2020

Levels 01-5 - Sunday, March 15, 2020

#### Math Kangaroo:

Thursday, March 19, 2020

#### PhysicsBowl:

Wednesday, March 25, 2020

Friday, April 10, 2020

April						
S	M	T	W	T	F	S
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2
3	4	5	6	7	8	9

Special Thanks to Tanya Zaliznyak for organizing Math Kangaroo and to Marleine Chiofalo for organizing Le Grand Concours, both - for the past 10 years and going!



\*Photos by Natalia Ilina, Green Ray Studio

# CAFÉNOVA 2020

www.schoolnova.org/nova/cafenova

## CAFÉNOVA STARTS IT'S SECOND YEAR!

2020 marks the second year of CaféNova, a series of evenings for STEM-interested high school students to meet distinguished professionals working in the science and math fields.



### CAFÉNOVA - January 23, 2020

On Thursday, Jan. 23, the second CaféNova series kicked off with a dive into the field of physics.

Professor Abhay Deshpande, Joanna Kiryluk and Axel Drees, our guests for the evening, all shared stories of their research and how they became involved with physics.

Professor Kiryluk discussed her IceCube at the South Pole research project. To better study deep space particles, Kiryluk has traveled to Antarctica to work at the IceCube Neutrino Observatory, which helps find information to solve mysteries' astrophysical events like black holes. Students were able to see how physics can take them to every corner of the earth and into the universe! Professor Deshpande delved into his research with the electron-ion collider to explore the smallest parts of matter - quarks. Deshpande is the director of the electron-ion collider at Brookhaven National Lab (BNL), where the U.S. Department of Energy recently announced plans to build the collider at the BNL campus.

All three professors were born internationally (Deshpande in India, Kiryluk in Poland and Drees in Germany), but were able to show the like-mindedness of physicists, who think in equations and see the world with a unique point-of-view.

[SEE PHOTOS AND UPCOMING ANNOUNCEMENTS](#)

## CAFÉNOVA WELCOMED GUESTS:

**JOANNA KIRYLUK**  
Associate Professor of Physics  
Department of Physics and  
Astronomy, SBU  
Joanna conducts her research with the IceCube neutrino telescope at the South Pole, focusing on astrophysical neutrinos from outside of our Galaxy.



**ABHAY DESHPANDE**  
Professor of Experimental  
Nuclear Physics, SBU  
He also serves as Director of Science for the Electron Ion Collider (EIC) and the Center for Frontiers in Nuclear Science (CFNS)



**AXEL DREES**  
Professor  
Department of Physics  
and Astronomy, SBU  
Professor Axel Drees studies the plasma of quarks and gluons that made up the universe for a split second after the Big Bang.



## RELATED. IN THE NEWS:

U.S. Department of Energy has announced it will build a next-generation nuclear physics facility — an electron-ion collider (EIC) — at Brookhaven National Laboratory. And with that tool, questions about the heart of the atom will be answered in Upton.

By the end of this decade, a new electron accelerator ring will be build to collide electrons with ions. Simply, the electron-ion collider will be similar to a microscope, allowing US to take 3D pictures of the subatomic quarks and gluons. The EIC will be a game-changing resource for the international nuclear physics community. [READ MORE](#)

\*Photos by Anya Cartwright