

the Bulletin Board

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THE BNL GAMMA FOREST



BERA FILM SERIES

BACKSTREETS OF PARIS

January 18 Lecture Hall 8:30 p.m.

The mysterious Montmartre section of Paris serves as the background for this drama of intrigue, suspense and murder. Three of France's top performers have combined talents into an absorbing story centered about a hotel inhabited by characters of dubious background. Francoise Rosey plays the proprietress, a greedy informer with a reputation for having killed her husband. Paul Meurisse is a trusting criminal and the victim of her plotting, and Academy Award winner Simone Signoret is his lusty accomplice.

Romeo and Juliet will be shown on February 1, 1962. The date of this film had been improperly listed on the posters located throughout the Laboratory.

NORTH GATE NOTICE

The North Gate is now open, for EXIT only, from 1700 (5:00 p.m.) to 1800 (6:00 p.m.) on regular working days.

There's a great difference between good, sound reasons and reasons that sound good.

Above: A section of the Laboratory's new Gamma Forest.

Left: Installation of the gamma source in the Gamma Forest last November.

On November 22, 1961, a new research facility was put into operation at BNL. Called The Gamma Forest, the facility is the newest project in the Biology Department's radiobotany program.

Nuclear test explosions and waste disposal of radioisotopes have introduced into the environment substantially higher levels of ionizing radiation than have normally been present throughout the evolution of life. The presence of these higher levels of radiation – and the fact that man has the ability to increase them further, at least locally, by enormous factors – has stimulated many studies, at Brookhaven and elsewhere, of the effects of radiation on the earth's organisms. Investigations of the deposition of radioactive debris on the earth's surface have shown that it is carried by winds into the middle latitudes of both hemispheres where it is brought to earth in rain and snow.

The principal vegetation of these wet areas of the middle latitudes of both hemispheres are forests. The BNL Radiation Ecology Project has been initiated in order to gain some idea of the nature of the changes to be expected from increased low levels of ionizing radiation in these forests. Unlike the Gamma Field, the vegetation that is irradiated within the Forest is growing as a part of the natural vegetation at the Laboratory. The facility consists of a 50-acre forested tract in the northeast corner of the site enclosed by two fences. At the center of the tract is a 9500-curie gamma source of Cesium-137. The source is arranged on a pulley mechanism similar to that used in the Gamma Field, so that it can be shielded at regular intervals in order to allow access to the Forest. Since November 22, the source has been exposed during 20 hours of each day, a schedule that will be maintained indefinitely.

(Continued on following page)

1962 HOLIDAY SCHEDULE

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1962 HOLIDAY SCHEDULE

1962 BNL HOLIDAYS

Listed below are the Laboratory holidays scheduled for the calendar year 1962:

Monday	January 1	New Year's
Thursday	February 22	Washington's Birthday
Wednesday	May 30	Memorial Day
Wednesday	July 4	Independence Day
Monday	September 3	Labor Day
Thursday	November 22	Thanksgiving Day
Friday	November 23	*Holiday
Friday	December 21	**Half-Holiday
Monday	December 24	*Holiday
Tuesday	December 25	Christmas

*Additional holidays.

**For 1962 the half-holiday preceding Christmas will be observed on Friday, December 21. The half-holiday for employees who work other than the normal Laboratory work week will be the last four hours of their regularly scheduled work preceding December 24.

THE BNL GAMMA FOREST—Cont'd

Radiating out from the Forest's central gamma source are lines of thousands of small bamboo and aluminum stakes that mark the boundaries of permanent plots. Over the years, these plots will be measured repeatedly for population studies and other investigations. Adjacent to the radiation tract is a 150-acre control - an un-irradiated fenced forest area used for comparisons.

By the end of the first year's irradiation, it is expected that most of the trees of all species within 35 meters of the source will have been killed. The pines, by far the most sensitive of the trees in this vegetation, will have been killed to much greater distances. These estimates are based on the radiosensitivities that have been determined experimentally, by research already conducted within the radiobotany program, for plants with similar nuclear volumes and numbers of chromosomes. These two factors, as previous BULLETIN BOARD articles have pointed out, are primary keys to plant radiosensitivity.

Using the Gamma Forest, research is currently underway to measure the changes in the plant populations which will take place within this vegetation. Under intense irradiation, a shrub community is expected to replace the present forest. The productivity of this new community (total amount of solar energy fixed by the plants of the community) will be compared with the productivity of the natural forest. Other studies in the Gamma Forest will be concerned with genetic and physiological effects of the irradiation of plants. From this work, it is hoped that it will be possible to predict potential effects of various levels of ionizing radiation on other vegetation types.

BASKETBALL

The god Bacchus frowned on Metallurgy last Tuesday as the Old Timers bobbed and weaved to a 25-16 victory. By winning, the Old Timers walked off with first place in the first-half of the BNL slo-break basketball league.

The Phoubars earned second place laurels by touching the Untouchables for 39 points while giving up only 25 to the opposition.

Though Biology kept even (16-16) with the Chuckers in the second half of their game, they were outscored in the

first stanza and lost by a score of 29-20.

Next Tuesday's second-half openers will see Biology meeting the Old Timers; Phoubars against Metallurgy; and the Untouchables versus the Chuckers.

First Half Standings

TEAM	WON	LOST
Old Timers	6	1
Phoubars	5	2
Chuckers	4	3
Metallurgy	3	3
Untouchables	2	4
Biology	0	7

LAST WEEK FOR ART SHOW ENTRIES

Registration for the BNL Employees Art Show, to open on February 14, will continue through this week only. The submission of entries has been good to date, but we know there are other talented employees who would like to join the show.

All types of hand made art may be submitted for exhibit. This includes drawings, paintings, sculpture, ceramics, metal work, etc., but not photographs and other works of art produced by mechanical means. Pictures should be framed and ready for hanging. Employees and members of their immediate families who live with them may exhibit. The work of children will be accepted if, and only if, it constitutes a serious effort. We ask that parents use discrimination in submitting such exhibits.

Because the number of exhibitors is likely to be large, the number of objects accepted from each person will probably have to be limited. However, the necessity for such a restriction cannot be known until after all the registrations are in. Therefore, enter all the items you would like to show, and the committee will make such selections as the available space permits. The application blank is on page 4.

BNL VISITORS

Several visiting groups will be at BNL during the next week.

Tomorrow, Wednesday, members of the Long Island Chapter of the Young President's Organization will tour the site.

The Executive Committee of Associated Universities will meet at the Laboratory on Thursday afternoon, and the Board of Trustees will meet here on Friday morning.

Next Monday, January 22, a group of St. Bonaventure University physics students interested in high energy research will visit the Physics Department.

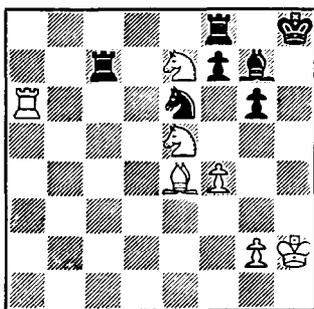
CERAMICS CLUB

Last week's article in the BULLETIN BOARD, asking who would like to join and help reactivate the Ceramics Club, was greeted with a definite response of interest.

Now we would like to get you all together on Friday, January 19 at 12:00 noon, at the Recreation Building. There will be a short meeting to organize the group. Come with your ideas and if you like - your lunch.

CHESS PROBLEM

In this week's problem it is White's move. White is down in exchange a Knight for a Rook. Is it enough for Black to win? Answer elsewhere in this week's BULLETIN BOARD.



RIFLE-PISTOL CLUB

The Upton Rifle-Pistol Club lost the last match of 1961 to Southampton by a score of 1034 to 1040. The top guns who made the close score were: C. McClelland, 268; P. Hichborn, 260; J. Rutherford, 259; and P. Colman, 247.



BERA BOWLING

PINK LEAGUE

The Allthumbs took 3 points from the Contacts. G. Fales was up to her old tricks with 174, 176, 150/500 for the Thumbs. C. Lydecker for the Contacts rolled a 170.

The Dipions took 4 from the Twinkletoes. The Dipions' G. Austen now holds high game with 197, high gross game with 258. Her series for the night was 456. E. Norton, also for the Dipions, converted the 6-7 split.

The Question Marks dropped 3 points to the Nightingales. D. Dioguardo for the Marks rolled 158/424.

GREEN LEAGUE

The Fire Department took 4 points from the Gnats. Texiera helped his team to victory by rolling a 210, 199, 196/605 series.

The Old Timers I beat the Old Timers II, 3-1. For the winners, Adams rolled 189/524 and Hardman, 186. Gilmartin tried for the losers, rolling 187/533.

The Reefers lost to the Old Timers III, 3-1. Horwath and Walker helped out the winners rolling 202 and 199, respectively. Ratyca rolled a 187 for the losers.

The Electrons won over the Black Birds, 3-1. The tough men of the Electrons were Cobb 180/521, Dvorak 218/536, and Tomesch 193/536.

RED LEAGUE

The Downunders met the Cosmos and fell down under losing 3 points. High men for the Cosmos were Bernatzky 209/474, Tranis

MIXED DOUBLES TOURNAMENT

PORT JEFF BOWL

3:00 P.M.

FEBRUARY 3

Here we go - let's get up some steam. Take a partner - make up a team. Just "Twist" on down to the Port Jeff Bowl, set up the pins, and let 'em roll!

ENTRY APPLICATION

Submit to Recreation Office Must be accompanied by \$5.00 non-refundable fee

1. Lady Bowler (name).....BNL Employee (yes) (no)

Average is.....in.....League at.....Lanes

2. Man Bowler (name).....BNL Employee (yes) (no)

Average is.....in.....League at.....Lanes

Received Recreation Office.....

Our Matchmaker Service is shaping up very nicely. If you don't have a partner, call L. Baker, Ext. 591, or Judy Reidl, Ext. 2245.

RULES

- Prizes will be based on scores plus handicaps and awards given as follows:
1st Place Team - Two trophies and certificates for two custom-fitted bowling balls. (Team High Gross Series.)
2nd Place Team - Two trophies.
3rd Place Team - Two trophies.
Ladies' Individual High Gross Game - One trophy.
Men's Individual High Gross Game - One trophy.
 The above prizes are guaranteed for the minimum number of tournament entries (30). Additional prizes will be awarded based upon the number of team entries in excess of 30, e.g., 4th and 5th place teams, 2nd place ladies' and men's individual games. No ABC or WIBC prizes!
- Team entry fee, including the cost of bowling, is \$5.00. Entry blank and fee must be presented at the Recreation Office not later than 3:00 p.m. on Friday, January 26. No entries will be accepted after the first 64 have been received. The fee is non-refundable; only in the event that the minimum number of team entries (30) is not reached will the fee be refunded and the tournament called off. Teams not present and ready to bowl at the start of the tournament will forfeit the team fee.
- The rules of the American Bowling Congress are adopted for this Tournament except as otherwise stated herein.
- The Decisions of the Tournament Committee (G. Sabine, L. Baker, J. Reidl, J. Pontieri, J. Sucher, H. Biesel, J. Kampe) shall be final.

193/468, and Skelton 162/464. The greatest help to the Cosmos were the Downunders Zahra rolling 105/425 and Biesel rolling 113/419. Guacci wasn't much help to the Cosmos though he bowled 182, 181/522 for the Downunders.

Then there were the H.P. Ins and the H.P. Outs. It seems that the Ins were more in the inn than they were out. Amongst the clatter of nickles and dimes the H.P. Ins took 4 points from the H.P. Outs. Pollock shook out a 466 series, Lacey stomped out a 202/507, and Beckwith stirred out a 453 series. Baker combined with Young to also aid the Ins to victory.

The best Biology could do in trying to stay on top in the league was to split even with the Ah So s. Combatti rolling 184/478, and Ruscica, 165/460 were the big guns for Biology. Brockbank's 490, Walker's 475, and

Jackson's 471, together with Rutan's high game of 198 were needed to split the night's activity.

The Mecca men took three from the Utilities. High men for Mecca were McGrann rolling 225/561 and Roberts rolling 177/473. Iarocci's 214/559 and Connolly's 204 game helped the Utilities win at least one game.

BLUE LEAGUE

Once again the Alleygators came through strong enough to take all 4 points from the Bubble Finks. The Gator with all the power and size was Big Bad Dan Stelmaschuk. He rolled a 181/519. Lambeck put up such a smoke screen that the Finks didn't see his 182/497 series. Highest for the Finks was Baer with a 441 series, which was not good enough.

(Continued on following page)

THIRTEENTH BROOKHAVEN LECTURE

By DR. OTTO STRUVE
 Director,
 National Radio Astronomy Observatory
 Title: GALAXIES
 LECTURE HALL: 8:00 P.M., WED., JAN. 17

A buffet supper (\$2.75) will be served at the Brookhaven Center before the lecture, beginning at 6:00 p.m. Reservations should be made at least one day in advance by calling Ext. 2302 before 5:00 p.m., or Ext. 2453 in the evenings. Refreshments will be available in the Research Staff Lobby following the lecture.

ANSWER TO CHESS PROBLEM

White wins by:

- | | |
|--|---|
| <p>WHITE</p> <ol style="list-style-type: none"> 1. R x N 2. N5 x P Check 3. N x R Check 4. N-N8 Check 5. B-B3 Check 6. N-N6 Mate | <p>BLACK</p> <ol style="list-style-type: none"> 1. P x R 2. K-R2 3. K-R3 4. K-R4 5. K-R5 |
|--|---|

Bowling (Cont'd)

The Splitters rolled against the Nuclides and the Nuclides came out with 3 points. The Nuclides who were in the limelight this time were Kukacka rolling 188/474 and Scarlett rolling 175/478. The Splitters had three good men - Carter, 171/478, Sick, 189/480, and Spira with a 471 series.

The Bubble Boys took the Skins for 3 points. The top man for the Bubble Boys was Frantz

with a 426 series. For the Skins, Remy rolled a 473 series, and Lento rolled 179/470.

The Techs and Leftovers slugged it out last Wednesday night and the Techs came out as the winners again taking 4 points. Larsen shot up the alleys with a 623 series, he was a little disappointed because only two of his games were in the 200's. Heins helped out the gang by putting in a couple of good shots which gave him a 540 series.

Registration Blank for Art Exhibit

Name of Artist.....

Laboratory Connection.....
 (Employee, member of family)

Address & Telephone.....
 (home, if member of family)

Title & Description of Proposed Entries
 (Indicate size of paintings, drawings, etc.; space needed if sculpture, etc.)

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Return to George Sabine, Recreation Office, by January 21, 1962.

CLASSIFIED ADS

FOR SALE

1955 PONTIAC - 2 dr., 860, r&h, A/T. Excell. cond.; family has outgrown. \$400. R. Sollanek, Ext. 311.

1955 PLYMOUTH SAVOY - 2 dr., automatic, power steering and brakes. 65,000 miles. Asking \$300. Dick, Ext. 601 or PA 7-1460.

1950 DESOTO - Good body, engine overhaul 2000 miles, uses no oil. \$150. Babb, Ext. 2285 or SE 2-6621.

1956 FORD - Fordomatic, 6. cyl., new tires, excell. cond. Would keep but just inherited another car. Sale price, \$400. J. Klein, Ext. 2278.

HOUSE - Custom ranch, Brookhaven. ¾ acre plot, 3-4 bedrooms, 2 full baths, full basement, oil hot-water heat, fireplace, appliances, \$17,500. For information call G. Weinstein, Ext. 439 or AT 6-0263.

HOUSE - Mastic, 2 bedroom, 100 x 120 ft, landscaped. 15 minutes from Lab. Marie, Ext. 2172.

RANCH HOUSE - Port Jefferson, 3 bedrooms, large living room, dine, large eating space in kitchen, garage, storms & screens, 1½ baths, stockade fence, venetian blinds. House 1½ yrs. old. Walk to shopping, G.I. Mortgage. \$15,500. HR 3-0178 evenings.

BOAT - 1960 20 Cruisers, Inc. Outboard Cruiser, 75 hp Evinrude. Full navy top plus extras. \$1700. J. Clint, Ext. 657.

HOUSE - Shoridge Hills. 3 bedrooms, 1½ baths, large living room, recreation room, laundry, fireplace, private beach rights,

wooded landscaped lot, fireplace. SH 4-9877 evenings.

CRIB - Carriage, play pen, & assorted baby furniture. Reasonable. Ext. 2272 or JU 8-9317 after 6:00 p.m.

1960 WASHER - 2 cycle, 9 pound, \$50. R. Sollanek, Ext. 311.

EICO 20 WATT INTEGRATED AMPLIFIER - Excell. cond., \$25. J. Gries, Ext. 2249.

MEN'S HOCKEY SKATES - Size 7, used 2 times. \$12 new; sell for \$7. Ext. 639 or AT 6-0372.

SKIS - Head Skis, standard 7 foot, CubCo safety bindings, \$50. Ext. 439.

GAS RANGE - Marine 2 burner bottle gas range, suburban galley chef. In new cond. \$25. Ext. 2381.

SKATES - Boy's hockey skates, size 1. Boy's figure skates, size 3. Ext. 583.

STEREO PRE-AMP - Eico HF 85, fully wired, excell. cond., \$35. Basic Amplifier, Regency 350A, 30 watt, \$25. Record changer, Garrard 80M, \$10. Also assorted monaural and stereo cartridges. Smith, Ext. 459.

SKIS - Wooden, with steel edges, 205 cm. long, used one season. Ext. 605.

MARLIN MODEL 56 - Lever action, .22 micro-groove, peep sight, plus 4X scope by Marlin, 7 and 10, clip feed, 80 rounds ammo. Cost \$89, will sell for \$38. In new cond. Ext. 467 from 11:30 a.m. to 12:30 p.m. only.

STUDIO COUCH - With two bolster cushions. Original upholstery, light blue and gray. Additional custom-made cover, deep blue. In excell. cond., \$20. AT 6-0058 after 6:00 p.m.

WANTED

GOLFERS - To challenge Old Timers golf teams, now preparing for spring tournament. Looking for any and all challengers. First game in May. Hackers and Duffers preferred. J. Pontieri, Ext. 2387.

HOME FOR IRISH SETTER - Male, 2½ years old. Will be given to someone who can provide a good home. Must be able to run free. G. Rogers, Ext. 481.

ICE SKATES - Ladies' size 7; men's, size 9-9½. Ext. 2107.

ICE SKATES - Boy's hockey or figure, size 6½-7. Men's skates, hockey, size 11. W. Lewis, Ext. 2278.

BLUE-JAY or JET - Used but in good cond. Reasonable. Kay, GR 5-3263 after 5:30 p.m.

HOUSEHOLD HELP - Steady, one day or one-half day per week in Shoreham. SH 4-5096.

FOUND

GLOVES - Black leather. Ext. 2107.

CARPOOLS

Would like a ride from South Ocean Ave., Patchogue to Laboratory. Ext. 2464.

Wish to join or form carpool to Hofstra Coll. Tues. & Thurs. evenings for 6:15 class. Prefer N. Shore (Smithtown-Port Jeff area). M. Hilgemeier, Ext. 2531.

Want to join carpool from Centereach. N. Upenieks, Ext. 2285.

Would like to join carpool from Patchogue (Main Street area). Marie Follenius, Ext. 301-107.