# the Bulletin Board

VOLUME 16, NUMBER 48

Published by the BNL Personnel Office

August 20, 1963

#### BERA FILM SERIES



Thurs., August 22, 8:30 p.m., Lecture Hall STARRING:

MARIA SCHELL, STUART WHITMAN, AND ROD STEIGER

"A fine picture . . . '

The New Yorker

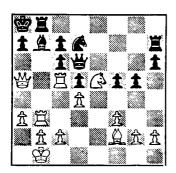
"Generates dramatic power . . . " Herald Tribune

"Solid entertainment . . . "

N.Y. Post

Thursday night's movie is the final film in the 1963 Summer Series. The Fall Series will begin on September 5 with the showing of "The Seven Deadly Sins." Now is the time to buy series tickets!

#### CHESS PROBLEM



In this week's problem, White is to move and win. Black is a bit cramped, which is the point, of course. It is an interesting tangle, but is it clear what White can do to profit by the situation? Answer elsewhere in this week's BULLETIN BOARD.

# DR. J. ROBERT OPPENHEIMER IS FIFTH PEGRAM LECTURER



Dr. J. Robert Oppenheimer

Dr. J. Robert Oppenheimer, Director of the Institute for Advanced Study, is the 1963 George B. Pegram Lecturer. His lecture series, entitled **Niels Bohr and His Times,** will be given as follows:
"THE NUCLEAR ATOM" – Mon., Aug. 26

"THE NUCLEAR ATOM" – MON., AUG. 26
"COMPLEMENTARITY" – Wed., AUG. 28
"THE ATOMIC NUCLEUS" – Fri., AUG. 30

Because the demand for lecture tickets, both from BNL employees and the general public, has been larger than usual, it is planned to hold the lectures out-of-doors on the field adjacent to the theatre. The lectures will begin at 8:30

p.m. each evening.

Dr. Oppenheimer was Chairman of the A.E.C.'s General Advisory Committee from 1947 through 1952. He was a member of the Board of Overseers of Harvard University, 1949-1955, and President of the American Physical Society in 1948. He received the U.S. Atomic Energy Commission's Enrico Fermi Award in 1963, the seventh distinguished scientist to be so honored.

### CAFETERIA SPECIAL

#### THURSDAY, AUGUST 22

Celery & Olives Cantaloupe Chicken Cacciatore with Spaghetti Tossed Green Salad Shortcake Beverage \$.99

#### **POOL SPECIAL**

More than fifty youngsters and many spectators turned out for last Friday's Pool Special. The first event was a Getting-Dressed-Underwater contest. Its winner was Martha Zollo, who barely managed to outdress Rick Parsons. In the second event, held for younger children, Lisa Jackson and Charles Drake fought to a tie in the Block Fetch. Each gathered a grand total of nine blocks.

Next Friday's Special (August 23 at 3:30 p.m.) will be a balloon race. Prizes will be awarded the winners and all youngsters are invited to participate.

#### LABOR DAY NOTE FROM FISCAL

Labor Day, Monday, September 2, will be observed as a regular Laboratory holiday. The shortened work week will mean that weekly pay checks will not be completed in time to be available to weekly shift employees who are not scheduled to work on Thursday and Friday, September 5 and 6. These employees may have their checks mailed to them if they will leave their name, life number and address with the Cashier on or before Tuesday, September 3.

Due to the short work week, every effort should be made to deliver time cards to Payroll before 10:00 a.m. on Tuesday September 3.

#### SAFETY LEAFLET AVAILABLE

A safety leaflet giving instructions for antidotes for common household poisons and overdoses is available in limited supply at the BNL Safety Office. The publication is suitable for posting inside your home medicine chest. Single copies may be obtained at Building No. 144 or by telephoning Ext. 590 or 591.

# PRODUCTION OF A NEW ANTI-PARTICLE OBSERVED AT BNL

A team of Brookhaven National Laboratory and Yale University physicists has observed the production of a new anti-particle of matter, the anti-Xizero. Although its existence has been predicted on theoretical grounds for several years, the Yale-Brookhaven experiment is the first to provide confirmation of this rare particle. The work was done at the Laboratory's Alternating Gradient Synchrotron under the auspices of the U.S. Atomic Energy Commission.

This research confirms the fundamental physics theory of quantum mechanics which states that for every known elementary particle there must be an anti-particle. A paper in the August 15, 1963 issue of PHYSICAL REVIEW LETTERS describes in detail the reaction resulting in this event.

In the experiment, a beam of antiprotons at an energy of 3.69 Bev, produced by the AGS and separated by an arrangement of magnets and electrostatic separators, was directed into a 20-inch liquid hydrogen bubble chamber. Out of some three hundred thousand photographs of proton-antiproton interactions obtained in the bubble chamber, three events were observed in which an anti-Xi-zero was produced. Due to its lack of electrical charge, this particle does not leave a visible track in the chamber. Moreover, its immediate decay products, an anti-lambdazero and a neutral pi-meson, are also unobservable. The subsequent decay of the anti-lambda particle, however, does leave visible tracks, and from these decay products and other phenomena the preceding chain of events can be deduced. It can also be determined that the lifetime of the anti-Xizero particle is about one ten billionth of a second.

After this discovery, any new particles found in the future would require the start of entirely new families of these fundamental building blocks of matter. Several such new families have already been postulated.

The Yale University physicists who took part in the experiment are Charles Baltay and Drs. Jack Sandweiss, and H.D. Taft.

The Brookhaven physicists who took part in the experiment are as follows: Drs. B. Brian Culwick, William B. Fowler, Joshua K, Kopp, Robert I. Louttit, James

#### Arrivals and Departures

#### WELCOME TO BNL

COSMOTRON

COSMOTRON	
Thomas J. Farra	Ext. 2511
Norman C. Hoffman	2511
Instrumentation & Health Physics	
Peter S. Littlefield	2570
Frances A. Mahnken	362
MEDICAL	
Charles R. Young	
Physics	
Paolo Franzini	2614
Benjamin H. Hertzendorf	2677
Catherine V. Smith	574
PLANT MAINTENANCE	
Barbara Baldwin	565
REACTOR	
Gail T. Caliguri	394

#### RECENT DEPARTURES

CHEMISTRY
Shiego Tanaka
MEDICAL
Hans Cottier
Paul Reilly
NUCLEAR ENGINEERING
John D. Garrison
PHYSICS
Robert Borruso

#### **BOWLING LEAGUES FILLING UP**

Entries are pouring in to the Recreation Office for this winter's Bowling Leagues. Practically all of last year's teams will be back, plus several newlyformed ones. There is still room for a few more new teams in some of the leagues, so rush your entry. Last year's teams are reminded that their priority to return to the same league expires if their entry is not in by August 23.

Several teams are still in need of one or two more bowlers – if you're interested, call G. Sabine, Ext. 391. Preference seems to be for new bowlers (because of the advantage that comes with improvement over the season), but intermediate and high average bowlers are needed also.

#### **BOWLING CALENDAR**

#### **AUGUST**

- 23 Expiration of entry priority
- 30 Deadline for all team entries

#### SEPTEMBER

- 3-4 League team captain's meetings
  - 10 Executive Board meeting
  - 16 Season starts.

R. Sanford, Ralph P. Shutt, David L. Stonehill, Robert Stump, Alan M. Thorn-dike, and Medford S. Webster.

#### **POOL SCHEDULE**

The swimming pool will continue on its present schedule through Friday, August 30. During the month of September, the pool will be closed. An announcement of its reopening in early October will be made in the near future.

#### **FISHING CONTEST**

Fishing contest winners for the June-July period are Nick Sowiak and George Lowe. Nick, who came back with an 18 lb. bluefish worth 906 points, is going to be hard to beat for largest fish of the year honors. Lowe's 51 lb white marlin wins the average fish award. His fish was worth 383 points which was the closest to the 394 average for this period.

The next two months, August and September, should see quite a few blues and stripers in the contest – so get busy!

#### SPLASH PARTY - AUGUST 27

The 1963 summer swim program will draw to a close on Tuesday, August 27, with BNL's sixth annual Splash Party. All participants in our swimming lessons and on-site children's summer program are invited to take part in the gala affair. There will be races, games; contests and prizes for all. Pool admission is free and everyone is bound to have a terrific time.

Pool doors will swing open at 11:30 a.m. and the program should end at approximately 2:15 p.m. Participants are urged to eat a light lunch sometime before 11:00 o'clock. See you next Friday!

#### CHILDREN'S PROGRAM

The on-site children's summer program is now in its final week. Attendance has been in the neighborhood of forty children daily.

This past week marked the conclusion of the doubles ping pong, darts and bean bag tournaments. On Friday, the youngsters enjoyed a hike and treasure hunt.

A picnic will mark the end of the program on Friday, August 23. Ice cream and punch will be served and parents are invited to bring a picnic lunch. There will be an arts and crafts exhibit plus an awards assembly for tournament and junior olympic winners.

### SOFTBALL ALL-STAR GAME AUGUST 28

#### **AROUND THE BASE PADS**

#### by: BOB CARCIELLO

Augst 28, one week from today, is the day which will climax the 1963 Softball season with the All Star Gamel Everyone is cordially invited to attend this game and cheer on your fellow teammates or co-workers. The game will be nine innings long: Brookhaven vs. National, National vs. Laboratory, and Laboratory vs. Brookhaven. Each league will be represented by two teams, each playing a full three innings. The teams are made up of four members from each team in the respective leagues.

Lou DeRosa, manager of the Brookhaven League winners, the Blue Jays, will manage the Brookhaven All Stars. Paul Vosganian, manager of the Laboratory League champs, the Chamber Chaps, will do the honors for the Laboratory League.

The National League winner has not been determined as of this writing. The Old Timers smashed the Dirty Sox, 21-6, thus delaying the final League outcome pending on what Medical can do against the Bubble Boys and E.A.O. in their final two games. If they should lose one of these games, it's all over. If they win both, a play-off game must be played to determine the League champion and All Star manager.

There will be free beer for all League participants so we urge you to come out to Field #2 on August 28 and have a grand old time! (In case of rain, the game will be played on the following day.)

Other team scores last week were: Potsareebies 12 – Odd Balls 7; E.A.O. 10 – Upton Downers 9 (in 8 innings).

#### SOLUTION TO CHESS PROBLEM

#### WHITE

#### BLACK

- NxP (threatening QxP mate)
- 1. QxN
- 2. RxQ and White wins handsomely
  If 1. BxN
- 2. QxP and mate next

#### PERSONNEL SERVICES

**Recreation Office - 3 Center Street** 

Daily 9:00 a.m. - 1:00 p.m.

#### **Mets Baseball Tickets**

Tickets are still available for September 1, Milwaukee; September 2, Cincinnati; September 10, San Francisco; September 13 and 15, Houston; and September 17, Philadelphia.

## 1963 BNL TENNIS TOURNAMENT: LUNSFORD TAKES PRODELL

#### STANGBY-SCOTT WIN

Mary Jane Stangby and partner Ken Scott, paired in the Mixed Doubles tennis finals, captured the 1963 honors by defeating Janet Whitehead and Sergio Monaro in a two-hour contest. The victors took the first set 6-4, gave crowd in the second 7-9, and then won the third set, 6-4.

After the first set was easily won, it looked like a short, two-set affair. However, the contestants got over their nervousness in the second and battled to the finish.

The climax of the tennis competition was played before a packed gallery last Thursday as defending Singles champion Al Prodell met newcomer Gary Lunsford in the finals.

It looked like a run-away for Gary as he captured the first set easily 6-3. But Al settled down in the second and his opponent began missing. Prodell took advantage of the lapse and evened the match 3-6, 6-3. Neither contestant seemed to take advantage of service and all games were hard fought.

Prodell continued his steady pace and Gary still could not get back into the game as the third and deciding set saw Prodell in the lead 4-0 and victory in sight. However, Lunsford had determination and Al was tiring. Gary fought from behind and took six straight games, set, match and the 1963 Singles championship.

Both contestants are to be complimented for an exciting match and excellent sportsmanship. Mr. Prodell's comment at the finish was, "Next year we should have a senior division!"

Trophies were awarded to the finalists by BERA and presented by George Sabine.

A word of thanks to the volunteers who assisted in the officiation of both tournaments.

### CLASSIFIED ADS

1960 FALCON - 2 dr., new tires, excell. cond. \$950. Art, Ext. 2126 or JU 8-7145 after 6:00 p.m.

1955 FORD - Fairlane. 6 cycl., automatic trans., r&h, 5 new WW tires. Runs like a charm. \$200. D. Schweitzer, Ext. 622

1962 FORD - Galaxy. Four door sedan. 6 cycl., stand. trans., shift, r&h, 22,000 miles. In good shape. B. Carciello, Ext. 769, 571 or AT 9-2159 after 6 p.m.

1962 CORVAIR - Monza. Fully equipped. Lee Barlow, Ext. 2871.

1960 RAMBLER - Sedan. Four door. R&H, excellent condition. \$900. R. Carciello, Ext 769, 571 or AT 9-2159.

1958 CHEVROLET - Bel Air. 2 door, hardtop, V8, automatic trans, power steering, air conditioning, r&h. \$850. Ext. 2827 or AT 9-9101.

1955 FORD - Tudor sedan. For the man who needs everything; a serviceable car with good tires and a clean record. \$190 or best offer. J. J. O'Neill, Ext. 2849

1954 STUDEBAKER - Champion. Mech. special, runs but needs work. Make an offer. N. Roberts, Ext. 670.

1955 FORD STATION WAGON - 6 cyl., std. shift, r&h. \$230. Davies, Ext. 2259.

1960 VOLKSWAGEN - Leaving U.S. in 10 days and must sell. Excell. cond., 33,000 miles, fully equipped. Sacrifice at \$850. Ext. 616 or AT 6-9364.

1954 BUICK - Good running cond. Leaving country, must self. \$250 or best offer. C. Zupancic, Ext. 2218.

1959 FORD - Convertible. Black, perfect. Must sell. Fred, Kings Park 2-4375 after 6:00 p.m.

1955 PONTIAC - Station Wagon. Gray, std. trans, r&h. Runs well. Asking \$250. Kuper, Ext. 542.

1957 FORD - Fairlane 500. 2 dr. r&h, power steering, auto. trans. \$150. P. Hagerty, Ext. 2662 or 281-5298 evenings.

1958 VOLKSWAGEN - Mech. superb, engine has 30,000 miles, new tires, recent complete brake job, repainted inside and out. Cost of above work \$550. Will sell for best offer over \$875. Tom Moran, Ext. 570.

1959 PLYMOUTH - Station Wagon. 9 passenger, std. trans, heater. Clean, good cond. Leaving country. Available early September. R. Stump, Ext. 2505.

1957 CHEVROLET - 2 dr. sedan, 6 cycl. std. trans, good cond. Must sell by Friday, Aug. 23, as owner is leaving Saturday. Best offer around \$300. William True, Ext. 2612.

1961 DODGE - Seneca. 6 cycl., automatic trans. Fewer than 20,000 miles. \$1450. T. Moran, Ext. 570.

1962 VESPA - 150 - 4 speeds, windshield, rear seat. In perfect cand., like new. \$300. firm. Ext. 2548 or SE 2-2959 after 6:30 p.m.

1959 FIAT "500" - Bianchina, R&H, ww. Only 12,600 miles on this car. In A1 cond. AT 6-8448.

1939 CHEVROLET - Operacoupe, 67,000 orig. miles, new shocks & brakes. Perfect cond. Must sell, best offer. Ed Kiefer, Ext. 2692.

1958 PLYMOUTH - 2 dr. sedan, 2 new tires, new brakes & clutch & shift hit, 58 Chrysler 392 V8 engine. Must sell, best offer. Ed Kiefer, Ext. 2692.

1956 RAMBLER - Sedan. 6 cyl., std. shift, reclining seats, seat belts, good cond. Owner leaving Lab., must sell. Best offer takes it. Ken Rily, Ext. 2614.

1960 VALIANT - White V-200 Station Wagon with extra rear seat, r&h, etc. Orig. owner, low mileage. AT 6-8215.

1956 CHEVROLET - Engine, all mech. parts in excell. cond. Std. shift. \$300. Available August 22. Purdie, Ext. 614.

1960 FORD - Fairlane. 4 dr. sedan, 6 cyl., auto., r&h, 34,000 miles, new battery, muffler & tires. \$1100. AT 6-9621.

1959 FORD - Consul sedan. Four cyls., 30 mpg, low mileage, r&h. Ext. 2873 days, after 5:00 p.m., Ext. 720.

1954 MERCEDES 300S - Mech. superb, new top. Arriving with owner from Germany about August 25. A. Rogers, Ext. 388 or SH 4-5626.

1960 FORD - Falcon. Black & white, 2 dr. sedan, perfect inside and out, new tires, 33,000. \$950. Art, Ext. 2126 or JU 8-7145. HOUSE - Colonial, 4 bedrms., 6 yrs. old. Port Jefferson (Harbor Hills). 2½ baths, built-in range, oven, and dishwasher, matching refrig. Dining-room, heated full cellar, combo storms and screens. Private beach rights, near school. On attractive 1/3 acre. Good financing avail. \$23,900. Ext. 2449 or HR 3-2281.

HOUSE - Cape Cod. East Patchogue. 5 yrs., 3 bedrms and TV room. Full basement, alum. storms and screens, hot water oil heat, screened porch, 1 room redwood for boys. W/w carpeting living room. All electric, 1½ car garage. ½ acre. School bus on corner, low taxes. Residential area, near Sunrise Highway. Additional land available. GR 5-2896.

HOUSE - 2 bedrooms, 2 car garage, fireplace, baseboard oil heat. Located in East Moriches, 1 mile from village. Reynolds, Ext. 2389, 468, or 878-2348 after 5:30 p.m.

HOUSE - For sale or rent. 3 or 4 bedrooms, in Mastic area, 8 miles from Lab. SE 2-4147 anytime.

SAILBOAT - Snipe. Planked construction, 2 dagger-boards, new deck, fiberglassed daggerboard slot, new rudder. Excell. cond. Cheap - \$300. Neil, Ext. 2658.

SLOOP - 12'8" round bottom. C.B. Strip-built mahogany with dacron sails, SS rigging and hardware, Sitka Spara built to last a lifetime. Must sell - down to \$550. Have pictures on site. Paul, Ext. 598.

JERSEY SEA SKIFF - 22'4" with 2 bunks, large cockpit, built to take heavy seas. Trailer included. L. Schairer, Ext. 388 or AT 6-1024.

23° CABIN CRUISER - 1958 Owens. Enclosed standup head, stainless steel galley, sink, ice box, Navy top, stern cover, Sleeps 3, used only 160 hours, newly refinished this Spring. Excell. cond. GR 5-2629.

TV - 21" Emerson table model. Brand new picture tube. Perfect, \$35. Also: 17" Macy's Hyde Park console. Good cond, \$20. R. Hildenbrand, Ext. 777.

DANISH DESERT FLATWARE - Arne Jacobson design. Exhibted at Metropolitan Museum, NY, 1961. 6 desert forks, 6 tea spoons, 6 coffee spoons, 6 demi-tasse spoons. All new. \$15 value about \$35. Fischer, Ext. 2373.

17' CAMPING TRAILER - Mallard. Completely self-contained. 3-way lights, refrig. & 3 burner stove. Elec. brakes & equalizer hitch. Sleeps 5. Immaculate cond. \$1750. Ext. 2820 or SE 2-3296 after 6:00 p.m.

STEAMER TRUNKS - 2, large, old but serviceable. Buy them here and sell them at destination. \$8. each. V. Barnes, Ext. 2657 or HR 3-3597.

LAMPS - Early American hab-nail milk-glass with brass fittings. 1 pair for night tables, 13" high, \$7. per pair. 1 with milk-glass and maple base, 3 way light, white eyelet shade, 29" high, \$25. \$30. takes matched trio. Ext. 2439.

SIAMESE KITTENS - With papers, seal and blue point # 25 - # 40. Ext. 2885 or AT 6-0478 after 6:00 p.m.

WASHER - Kenmore auto., less than 4 yrs. old, in perfect cond. 2 wash cycles, 3 washwater temperature settings, 3 water level settings. \$75. Masterson, Ext. 435 or AT 6-2278.

REFRIGERATOR - International Harvester. 9 yrs. old. In good working cond. About 11 cu. ft. Cheap. Masterson, Ext. 435 or AT 6-2278. TRAILER - 2 wheel, sturdy construction, 5 ft. x 6 ft. Larry, Ext. 2704.

BASSETT HOUND - 8 mo. old. Westgate's Cordelia. Ext. 2812.

FREEZER - Frigidaire Imperial upright. 15 cu. ft. (525 lbs.) capacity. \$175. Warren, Ext. 445.

KITCHEN SET - Round table, 42" diameter and 4 chairs. Formica & chrome, \$20. Ted Schreiner, Ext. 2208, 2353, or LT 9-4845 after 6:00 p.m.

HOMLITE GENERATOR - 1500 watts, 115V at 400 cps, 28 V. DC at 15 amps with overseas repair kit. Best offer. G. Kiriokos, Ext. 422.

STEREO SYSTEM - Roberts 990 4TR tape recorder, stereo microphones, Lafayette AM-FM tuner, Garrad Mod A auto. turntable with ELAC 220S mag. cart. Lafayette 40 watt all transistor amp. 2 Lafayette 12" coaxial speakers in integrated Eliptoflex mahogany enclosures. \$550. D. Huene, Ext. 2338 or 281-9592.

BASSINET - White woven wood, excel. cond, \$10. Double bed with foam mattress & box spring, \$40. Danish style walnut table & chairs, very good cond., \$100. Grey persian lamb fur coat, sacrifice at \$40. Miscellaneous: crib, high chair, child's table & chairs, collapsible small crib. AT 6-0491.

OUTBOARD MOTOR - Johnson 5 hp, perfect running cond. \$50. Ext. 2381.

TV - Delmonico 8" portable, ideal for bedrm or playroom. 12 watt amplifier & speakers, Hi Fi. TV outdoor antenna, never used outside. Lee Barlow, Ext. 2871.

RADIO - Viking VFO all band, \$25. 35mm Argus C3 and case, \$25. 2½" x 2½" Yashica "A" and case, \$20. Ext. 2315 or JU 8-6879.

#### **LOST AND FOUND**

PARTIAL BRIDGE with tooth found in Biology parking lot.

SUN GLASSES - clip on, found in Biology Library.

SWEATER - ladies light tan found in Biology Library.

#### WANTED

ROOMMATE - Single girl to share comfortable apartment in Mt. Sinai. Private entrance, 5 min. from shopping. \$50. per month, incl. utilities. Ext. 2180 or HR 3-3876 after 5:30 p.m.

HOMES - For six kittens, now one week old. Available in 5 weeks. Variety of colors, shop early for best selection. A. Rogers, Ext. 388 or SH 4-5626.

ALUMNI - of New York City Community College (NY State Inst. of Applied Arts and Sciences in Brooklyn). J. Rosenblatt, Ext. 2455 or WA 9-4243.

QUALIFIED TEACHERS - For Middle Island Central School District 12. (Adjacent to the Lab. Dr. L.V. Nannini, YA 4-6400.

RIDER OR DRIVER - Free to Boulder, Colo. or vicinity, as early as possible in period of Aug. 22 to September 10. Ext. 2792 or 2440 for info.

#### FOR RENT

APARTMENT - Furnished. 3 rooms. Florida Road, Rocky Point. SH 4-9453.

APARTMENT - 4 rooms, all util. incl. Located in Farmingville, 9 miles from Lab. \$105. per mo. SE 2-6342.

HOUSE - Furnished. Leisurely Lane, Bellport. Through summer 1964. 3 bedrooms, study, pleasant living-dining rooms, grounds, double attached garage. Ext. 2263 or AT 6-8215.

APARTMENT - Large 5½ rooms. 440 Lockwood Dr., North Shirley. 5 min. from Lab. YA 4-6118 Saturday & Sunday, or see Bob at Bank

HOUSE - 3 bedroom Ranch near Lab. Lease available. AT 9-0705.

#### CARPOOLS

DRIVER/RIDER - From N. Bay Shore. 1 mile from Exit S3 Sagtikos, 1 mile from Fifth Ave Exit on Hechksher State. Dick, Ext. 2374.