

IAS/PARK CITY  
MATHEMATICS  
INSTITUTE (PCMI)

## PARTICIPANT INFORMATION AND GUIDELINES

IAS/PCMI Summer Session  
June 26 -July 16, 2005

Prospector Square Lodging and  
Conference Center  
Park City, Utah



The IAS/Park City Mathematics Institute  
is a program of the  
**Institute for Advanced Study**  
Einstein Drive, Princeton, New Jersey.

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***Note: Please bring this information booklet with you to the Summer Session.***

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**► AIRPORT SHUTTLE**

All PCMI participants make their own shuttle reservations so as to avoid confusion.

Participants whose travel is funded by PCMI may reserve their Utah airport shuttle via **All Resort Express, Inc.** Instructions are included in this mailing and posted on the PCMI website at [www.ias.edu/parkcity](http://www.ias.edu/parkcity).

Participants who did not receive funding for travel are encouraged to take advantage of PCMI's special group rate of \$54.00(US) for ground transportation through All Resort Express, Inc. Instructions are available in this mailing and posted on the PCMI web site at [www.ias.edu/parkcity](http://www.ias.edu/parkcity).

**► ANNOUNCEMENTS AND MESSAGES**

Announcements regarding schedule changes, activities, etc. will be posted on the bulletin boards located in the main Conference Center building. Also posted will be messages to participants.

**► BUS SERVICE**

Park City has a free bus service that travels all over the town and up into Deer Valley. Bus stop signs are located along the side or front of the Prospector Square Lodging and Conference Center. Buses leave about every 20 minutes, and schedules should be available at PCMI registration.

**► CHILD CARE**

PCMI makes no recommendations and has limited information regarding childcare in Park City, however the following may be contacted:

*Guardian Angels:* 1-435-640-1229.

*Little Adventures:* 1-435-649-5400

*Danville's Clubhouse:* 1-435-940-1607

*To obtain more information on childcare possibilities in the Park City area contact the Park City Chamber of Commerce at: 1-800-453-1360, or 1-435-649-6100.*

## **► CLASSES AND LECTURES**

All classes and lectures will take place at the Prospector Square Lodge and Conference Center. A general (tentative) schedule and a Summer Session calendar are available online at [www.ias.edu/parkcity](http://www.ias.edu/parkcity). Daily schedules are distributed each afternoon (for the subsequent day) and are posted on walls and doors throughout the conference center. Most programs will not have formal sessions on the weekends. A schedule for the first day of classes will be distributed with your Welcome Packet at Registration.

## **► CLOTHING**

Dress during Summer Session is casual, however shirts and shoes must be worn in the main Conference Center building.

Every effort is made to make the meeting rooms comfortable. As individual needs may vary, you should bring a sweater or jacket for those rooms that feel too cold.

## **► COMPUTER LAB**

### **Location:**

The North Lounge of the Conference Center.

### **Equipment:**

- 35 Desktop computers
- Wireless Hub
- 5 Ethernet Ports

### **Platforms available:**

- PC
- Mac
- Linux

### **Software available in the lab includes:**

- MATLAB (w/ Bioinformatics Toolbox)
- Mathematica (w/ Bioinformatics Toolbox)
- Maple
- Geometer's Sketchpad
- Fathom
- TeX
- Winzip 32
- WS-FTP
- PAUP
- SplitsTree4
- Phylip
- Adobe Acrobat Standard
- MS Office 2000
- MS Outlook
- Eudora Light
- Internet Explorer
- Netscape

### **Lab Opening date:**

Monday, June 27, at 8:00 a.m.

### **Lab Closing date**

Friday, July 15, at 6:00 p.m..

**Lab Hours:**

Open all day and into the evening. Key available at front desk after 11:00 p.m. Wireless hub in operation 24/7.

**Staff hours:**

8:00 am – 5:00 pm weekdays.

**General Lab Information:**

E-mail and Internet access through the computer lab is free. The lab is available for general use part of each day. Classes frequently meet in the lab, at which time we ask other participants to refrain from using the room. Class times will be posted on the doors and we ask that you do not enter the lab during a class session. We encourage economical use of computer time as a courtesy to others, especially those working on assigned projects as part of their program.

Be sure to bring a surge protector if you will be using a laptop computer in your hotel room.

Please note that this lab is a temporary set-up in a hotel meeting room using hotel tables and chairs. Those with repetitive motion stress conditions may wish to take precautions.

**Do not** install your own software on the lab's computers, and never copy software from the lab.

**SPECIAL NOTE TO GRADUATE SUMMER SCHOOL PARTICIPANTS: Please bring your laptop computer in order to participate in the group projects being planned for the GSS course work. A time-limited edition of MATLAB (good until the end of the Summer Session) can be loaded onto your laptop by the PCMI tech support staff so that you have the software necessary for the group projects. More details will be available at Registration.**

**► CONTACT INFORMATION FOR PARTICIPANTS**

U.S. Postal Service address:

(Your name), Guest  
Prospector Square Conference Center  
PO Box 681063  
Park City, UT 84068-1063

FedEx, UPS, or other delivery address:

(Your name), Guest  
Prospector Square Conference Center  
2200 Sidewinder Drive  
Park City UT 84060

Please note that anything sent via U.S. Postal service must be sent to the PO Box above – the Postal Service does not deliver mail to street addresses in Park City. Also note that mail sent to Park City through the U.S. Postal Service can be slow.

**Telephones**

The telephones in the sleeping rooms are for local calls and there may be a hotel fee charged for their use. If you wish to make long distance calls please use a calling card or a credit card. There are a few pay telephones located just outside the Grand Theater, in the main Conference Center building.

### **Message Center**

There will be bulletin boards for messages and announcements located in the main Conference Center building. We encourage you to check these boards at least twice a day since there is generally not time for announcements to be made during classes or programs. A list of mail waiting to be claimed in the PCMI office will be posted there daily.

### **► COPYING**

Copying for the program will be done in the PCMI office, which is open from 8:00 a.m. to 5:00 p.m., Monday, Tuesday, Thursday, and Friday; 8:00 a.m. to 1:00 p.m. on Wednesdays (see the *PCMI Office* section of this document for exceptions to these hours). The PCMI office is not open on weekends. Personal copying may be done for a fee, however program copying will have priority over personal orders.

Teaching Assistants and other personnel who are responsible for program copying should note that **24 hours notice** is needed to process your orders.

### **► DAILY OPERATION**

What should you expect on a typical day at PCMI? Breakfast is available from 7:00-8:15 a.m. in the Moose and Miner Room at the Grub Steak Restaurant, across the street from the front desk of Prospector Square Conference Center. The day's classes and seminars start at 8:30 a.m. (8:20 a.m. for the Secondary School teachers). You should consult the schedule you receive at Registration for the location of your program's meeting room and the starting time of the first seminar or class. (Daily schedules are posted in the Conference Center and available for you to take from the table in the foyer.) All programs break for lunch around 12:00 noon, resuming again as early as 1:00 p.m. Lunch is served in the PCMI tent. The Cross Program Activity, which is for all participants, takes place at 3:15 p.m. in the Grand Theater. Afternoon tea is available in the foyer after the Cross Program Activity. Occasional evening activities are scheduled, which are intended to be voluntary.

### **► DRIVING TO PCMI**

Participants whose travel is funded by PCMI and who elect to drive to Park City will be reimbursed at a rate of \$.365 per mile for the trip, up to the cost of a comparable round trip airline ticket. (The mileage reimbursement rate is subject to change.)

### **► FINANCIAL INFORMATION**

### **Reimbursements**

If you are eligible for a reimbursement from PCMI for expenses (e.g. travel expenses or supplies) please be aware that we must have original receipts in order to reimburse you. In the case of airline tickets, acceptable documents include: 1) the official Passenger Receipt issued by the airline, 2) the official e-ticket receipt that is sent to you in the mail by the airline, 3) an emailed itinerary (showing the price) plus your original boarding pass stubs. We encourage you to seek reimbursement early in your stay so that your check will have time to arrive from New Jersey.

### **Cash and Check Cashing (*Note: this information is changed from previous years*)**

In the past, PCMI participants have been able to cash their PCMI stipend/meal allowance/reimbursement checks at the local Wells Fargo Bank in Park City. As of this writing, that arrangement is in doubt for the summer of 2005 and future summers.

All participants should come to PCMI with any necessary cash, travelers checks, and ATM cards so that you have ready access to cash. There are numerous ATM machines throughout Park City that will accept all major ATM cards. Most charge a small fee per transaction.

### **► FITNESS**

The Silver Mountain Spa is located next door to Prospector and is offering temporary one-month memberships to PCMI participants for a fee of \$75 per person. The membership entitles you to attend classes, use the weight and cardio equipment and the pools, sauna, etc. See the health club staff at the Silver Mountain Spa's front desk if you are interested in joining.

### **► FOOD SERVICE**

Breakfast and lunch are considered to be an important part of the interaction that is the hallmark of PCMI. Once or twice a week the seating at lunch will be assigned so that program participants have the opportunity to get to know each other. We appreciate your cooperation.

The following catered meals are provided to all **registered participants**:

Breakfast and lunch, Monday through Friday, plus dinners on June 27 and on July 14. The meal plan begins with breakfast on June 27 and ends with lunch on July 15.

**Meals at PCMI are for the program's registered participants only**; family members or guests traveling with participants should make alternative arrangements for these meals. The exception to this rule are the opening and closing dinners, to which family members in residence at PCMI are welcome.

**Your name badge is your meal ticket and is required to be worn for all meals.** Name badges are required and will be checked at all meals – those without name badges or a guest meal ticket will be turned away.

**Breakfast Information:**

Location: Moose and Miner Room of the Grub Steak Restaurant (across the street from the Prospector Square Lodging). The Moose and Miner Room is entered through the restaurant door situated on the corner of Sidewinder Drive and Golddust Lane.

Hours: 7:00-8:15 a.m. (The restaurant cleans and re-sets the room at 8:15 a.m. – please plan your schedule accordingly so that you are finished eating in time.)

Menu selections will alternate daily between hot and cold selections:

- 1) Cold breakfast of juice, coffee, tea, cold cereals, yogurt, fruit, and baked goods.
- 2) Hot breakfast of eggs, breakfast meat, potatoes, baked goods, juice, coffee, tea.

**Lunch Information:**

Location: the PCMI dining tent (behind the main Conference Center building).

Hours: 12:00 to 1:15 p.m.

Menu selections: lunches consisting of a main meat dish and accompanying side dishes will be served each day.

A vegan entrée is available each day but **must be reserved in advance** – please let the PCMI office know that you prefer vegan. Funding considerations do not allow participants to switch back and forth between meat and vegan on a daily basis – you must make your choice for the entire three weeks of the Summer Session before you arrive at PCMI, and let the PCMI staff know. Otherwise, you will be expected to select your lunch from the regular lunch table.

Although served as a buffet, **lunch is not an “all-you-can-eat” meal.** Please wait until 1:00 before returning for any additional portions so that everyone has had a chance to eat. All participants are together at lunch, so please take this opportunity to interact with colleagues from other programs.

**Dinner Information**

PCMI will host two dinners during the Summer Session. All participants, their guests and families in residence at PCMI are invited to attend. The opening dinner will be Monday, June 27, and the closing dinner will be Thursday, July 14. A cash bar will be available at each. Evenings are often cool, so we recommend that you bring a sweater or jacket. Please wear your nametag to both dinners.

**Refreshments:**

Coffee and tea are available all day in the Conference Center (weekdays only). Cookies will be served each afternoon in the foyer outside the Grand Theater following the Cross Program Activity.



**Cooking for yourself:**

You will have a kitchenette in your condo unit. There are two grocery stores within walking distance of the Prospector Square Lodging and Conference Center, so bring your favorite recipes. In addition, the conference center has a small area at the back of the property that contains picnic tables and grills.

**► HOUSING FOR PARTICIPANTS**

PCMI-funded housing begins on Sunday, June 26 and ends on Saturday, July 16.

Unless otherwise arranged in advance for program purposes, extra nights are charged to the participants at \$70.00 per night. Participants will be housed in studios and condominiums at the Prospector Square Lodging and Conference Center and in the surrounding area. All assigned rooms will be within walking distance of the conference center or will be accessible by using the free Park City bus. Rooms in all locations have kitchen facilities in the room or nearby, with microwaves, coffee makers and refrigerators. Sheets and towels will be provided. The housekeeping staff will clean the rooms at Prospector Square once a week. If you are staying at an off-site condo arranged by PCMI, housekeeping information will be given to you at Registration.

Please inspect your room for damage upon arrival and report it to the Front Desk. You may expect to be charged for any damage during your stay.

**► LAUNDRY**

The standard studio units at Prospector do not have laundry facilities. The 2- and 3-bedroom units usually do. There is usually a laundry room available in the off-site condo buildings (such as Carriage House) as well.

For those who need a Laundromat, there are two located within walking distance of the Conference Center:

*The Lost Sock* at 1105 Iron Horse Drive;  
*Ying's Laundromat* on 1792 Bonanza Drive.

*Ying's* is the closest to Prospector Square and is near the intersection of the Rail Trail and Bonanza Drive (when walking up the Rail Trail toward Bonanza Drive, look to your right) *The Lost Sock* is in the industrial complex across Bonanza Drive from the Rail Trail intersection, on Iron Horse Drive.

**► LIBRARY**

A small Library will be located adjacent to the PCMI office, accessible via the stairs near the Grand Theater in the main Conference Center building. The library is open during PCMI office hours (8:00 a.m. to 5:00 p.m.) and operates on the honor system. Circulating books may be checked out overnight, to be returned by 12:00 noon the next business day;

some materials are non-circulating such as reference books. We will maintain a binder of class lecture notes for each of the PCMI programs; these binders are non-circulating and, like other reference materials, must remain in the library. There is also a small videotape library.

### **► LIQUOR LAWS**

Utah liquor laws are a bit unusual in that there are no bars in the state – instead there are 1) restaurants open to the general public in which you must purchase food in order to purchase a drink, or 2) private clubs in which you must be a member in order to purchase a drink. (Membership in these private clubs is generally purchased at the door for as little as \$5.00 in some cases – similar to a ‘cover charge’ – and is usually valid for more than one day; the rules vary from club to club.)

Regardless of where you are: *the legal drinking age is 21*, and we ask that all participants respect the state laws of Utah.

### **► MEDICAL SERVICES**

If you have any medical needs, the **Park City Family Health Center**, is located within easy walking distance of the Prospector Square Lodging and Conference Center. Doctors are available day and night, and can treat anything from colds to broken bones. The Health Center is located at 1665 Bonanza Drive; the telephone number is 1-435-649-7640

**Important Note:** The altitude in Park City is 6,900 feet above sea level, and you may experience altitude sickness if coming from sea level. We strongly suggest that you do not do anything strenuous for the first 24 hours after arrival, and that you **drink plenty of water**. Signs of altitude sickness may range from headaches and nausea to chest pains. It is usually short-lived and harmless; however, if you have prolonged symptoms, you should seek medical attention.

### **► NAME BADGES**

Name badges are issued at Registration and must be worn throughout the Summer Session. Your name badge serves as a valuable aid to interacting with other participants and also **functions as your meal ticket** (see Food Service for more on name badges).

### **► NOTES FROM LECTURES AND SEMINAR**

All registered participants receive lecture notes and other course materials free of charge; materials are distributed by the course assistants. If extra copies are needed, please see the designated course assistant to place your order. A set of lecture and seminar notes will be maintained in the library for reference.

Lecture notes for both Undergraduate Summer School and Graduate Summer School will also be posted on the PCMI website. These notes will not be made “printable” until after the Summer Session.

## **► OFFICE**

The PCMI summer office is located on the second floor of the main Conference Center building. Office hours will be 8:00 a.m. to 5:00 p.m., Monday, Tuesday, Thursday, Friday, and 8:00 a.m. - 1:00p.m. on Wednesdays.

*Exceptions in Summer Session 2005: The PCMI office and library will be closed all day on Monday, July 4<sup>th</sup>, and open all day on Wednesday, July 6<sup>th</sup>.*

## **► PARK CITY LOCATION, CLIMATE AND ENVIRONMENT**

At 6,900 feet above sea level, Park City is located in the highest part of Utah. The surrounding mountains, with summits of 10,000 feet, lend themselves to such summer activities as hiking and mountain biking. Salt Lake City, the capital of Utah, lies 30 miles northwest of Park City.

Park City's summers are warm and sunny, usually protected from extreme heat by the high altitude. Daytime temperatures are generally in the upper 80's, while evening temperatures fall into the 50's and 60's. The evenings sometimes fall into the 40's, especially in early summer, so bring a few warm layers of clothing. Occasionally, weather patterns are warmer than normal. The average monthly precipitation is only about 1 inch in the summer, but brief afternoon downpours and thunderstorms are not uncommon. We suggest you wear layers of clothing to accommodate changing weather. Clothing should be casual and comfortable; shoes must be worn.

The air at high altitudes is thin and you can end up with a sunburn very easily, even when the day is not particularly warm. We recommend using sunscreen whenever you are outdoors.

Insects are not usually a problem in Park City itself, but hikers in the mountain or on the trails should take reasonable precautions, such as bug spray or lotion, and wear appropriate clothing to protect you from ticks, mosquitoes, etc.

Health Advisory: West Nile Virus may prove to be a problem: West Nile Virus is spread by the bite of a mosquito and, although mosquitoes are not prevalent in Park City, we suggest you take appropriate precautions when planning to spend time outdoors, especially between dusk to dawn. For more information on West Nile Virus, please see: <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>.

## ► RECREATIONAL ACTIVITIES

Despite its small size, Park City offers a multitude of activities. Several golf courses are nearby, and there are plenty of opportunities to enjoy tennis, fishing, hiking, bicycling, water sports, and hot air ballooning. Nearby stores rent sporting equipment such as mountain bikes, in-line skates and hiking gear. A 23-mile jogging, hiking and bicycling trail runs from Park City to Coalville along the old railroad right-of-way (known locally as The Rail Trail).

In the past, PCMI participants have organized soccer, Ultimate Frisbee, volleyball, or tennis games by posting sign-up sheets on the PCMI Message Center in the foyer of the Prospector Square Lodging and Conference Center. The City Park is a 10-minute walk from the conference center and has sports fields, a volleyball court, basketball courts, and tennis courts. The Prospector Square Lodging and Conference Center has a volleyball court on site as well as a small outdoor swimming pool and hot tub. The PCMI office will have a soccer ball and a basketball for borrowing.

There are over 70 restaurants offering a wide variety of cuisine in Park City, and the town has plenty of opportunities for shopping and entertainment, including performances at the Egyptian Theatre on Main Street. Many concerts will also be held in Park City and neighboring Deer Valley in July. A variety of musical styles including classical, country, folk, and rock will be performed by both solo artists and larger groups such as the Utah Symphony. The end of June through July also marks the Park City International Music Festival, featuring renowned international artists performing chamber music at various locations around Park City. Contact the Park City Chamber of Commerce at 1-435-649-6100 or visit their website at [www.parkcityinfo.com](http://www.parkcityinfo.com) for details.

PCMI participants often organize weekend outings by posting sign-up sheets on the Message Board. Participants are responsible for any costs associated with these outings (which usually are minimal). If a car is required and none is available through a participant, All Resort Express has car rentals and is located within walking distance of the hotel. The cost of a car rental shared among four or more participants is usually quite reasonable.

Further information about these and other activities will be available at PCMI registration and in the hotel lobby throughout the conference.

**4<sup>th</sup> of July Celebration!** The Annual Park City 4<sup>th</sup> of July Parade is held, appropriately enough, on July 4<sup>th</sup>, the United States' national holiday known as "Independence Day." PCMI will take the day off in order to allow our participants to view the parade or, better yet, be in the parade! In the past, this has been a well-attended and fun activity for PCMI across all our programs. Our entries are always strongly mathematical and just a bit whimsical, and we have won numerous awards in past years for our creativity. Meetings and planning sessions will start immediately once the Summer Session gets underway. Watch for announcements and sign-up sheets. If you have ideas you'd like to discuss ahead of time, please contact your program's organizers by email or Art Mabbott: [art@mabbott.org](mailto:art@mabbott.org).

There is a big town-wide picnic in City Park after the Parade, with some fun activities for the kids, some great local bands to listen to, and, usually, a rugby tournament to watch. Hot dogs, hamburgers, and pizza are for sale, along with soft

drinks and beer. After dark (around 9:45 p.m.) a fireworks display can be viewed from City Park or from the Resort Center further up the hill.

If you have a car and are looking for a real American Western experience, there are rodeos held in Oakley and West Jordan on the 4<sup>th</sup> of July weekend. Information can be found at <http://www.cowboyted.com/PRCAschedule.htm>.

### **► REGISTRATION**

- **Hotel Registration:** Upon arrival in Park City, please register first for your room at the front desk of Prospector Square Lodge and Conference Center (unless you have been instructed otherwise). You will be required to give a credit card number to be used for any incidental charges (e.g. telephone calls) that occur during your stay.
- **PCMI Program Registration: Sunday, June 26, from 1:00 p.m. until 8:00 p.m.** in the foyer of the Prospector Square Lodging and Conference Center. All participants must come to Registration to pick up your nametag (meal ticket), final schedule, computer lab information, and other material, and to have your picture taken. **Participants who cannot arrive during Registration hours on Sunday, June 26,** should come to the PCMI office in the main Conference Center building to register before attending meals, classes or seminars.

### **► SMOKING**

By order of the Utah Clean Air Act, all meeting rooms and sleeping rooms are smoke-free. Smoking is allowed only out of doors.

### **► TRAVEL DATES**

If you are coming for the entire three weeks of the Summer Session, you should plan to arrive on Sunday, June 26, and depart on Saturday, July 16. Classes and seminars end at 5:30 on Friday, July 15.

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### **► A MESSAGE FROM THE STAFF**

*We're looking forward to meeting you, and hope the 2005 PCMI Summer Session is a challenging and rewarding experience for you! Please don't hesitate to contact the PCMI office if you have any questions. We can be reached at 1-800-726-4427 or email us at [pcmi@ias.edu](mailto:pcmi@ias.edu).*

*Catherine Giesbrecht  
Administrator*

*Carleen Inderieden  
Project Coordinator*

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and

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