Rensselaer

NSF Young Scholars Program: Professors Kaltofen and Krishnamoorthy
Symbolic Computation Systems

PRELIMINARY SCHEDULE OF ACTIVITIES

Activities are scheduled in the following campus buildings: Quadrangle Dormitories (where the group is housed), Russell Sage Dining Hall (where the group eats breakfast and lunch), BARH Dining Hall (where the group eats dinner and all meals during Saturdays and Sundays), Amos Eaton Hall (where the lectures take place), and Voorhees Computing Center (VCC) (where the computer laboratory is).

WEEK 1

Sunday, July 23

3–5pm	Warren Hall	Dormitory check-in, Registration, Reception. (If you arrive after 11pm, please call 7459 from an outside safety phone on the columns with blue top lights to get the residence assistant on-call.)
5–6:30pm	BARH	Dinner served.

Monday, July 24

7–8:30am	Sage Dining	Breakfast served.
9–10:00am	Amos Eaton 214	Opening ceremony. Overview of program objectives (Profs. Kaltofen and Krishnamoorthy). Orientation with a student in the previous program (Mr. Thomas Doherty).
10:00–12:00am	Amos Eaton 214	Introduction to Maple—Number Systems (Profs. Kaltofen and Krishnamoorthy).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Lab 1 (series summation, arithmetic precision).
4:30–6:00pm	BARH	Dinner served.

Tuesday, July 25

7–8:30am	Sage Dining	Breakfast served.
9–10:30am	Amos Eaton 214	Introduction to Maple—Graphics Commands (Profs. Kaltofen and Krishnamoorthy).
10:30am–12	Amos Eaton 214	Management Information Systems (Mr. Nag).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Lab 2 (two dimensional Plotting).
4:30–6pm	BARH	Dinner served.

Wednesday, July 26

7–8:30am	Sage Dining	Breakfast served.
9am–10:00	Amos Eaton 214	Experiences with the computer network (Profs. Kaltofen and Krishnamoorthy).
10:15am–11:30	Amos Eaton 214	Introduction to Maple—Parametric, Polar representation (Profs. Kaltofen and Krishnamoorthy).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Lab 3 (Three dimensional and Parametric Plotting).
4:30–6:00pm	BARH	Dinner served.

Thursday, July 27

7–8:30am	Sage Dining	Breakfast served.
9:00am–9:30	Amos Eaton 214	Research Presentation (Mr. Wes Kaplow).
9:30am–10:30	Amos Eaton 214	Probability and Monty Hall Problem (Profs. Kaltofen and Krishnamoorthy).
10:45am–11:30	Amos Eaton 214	Computer Viruses I (Mr. Nathan Schimke).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Lab 4 (Monty Hall Simulation).
4:30–6:00pm	BARH	Dinner served.

Friday, July 28

9–10:30am	Amos Eaton 214	Personal Information Systems (Mr. Markus Hitz).
10:15–11:30am	Amos Eaton 214	Advanced Maple Functions – Solve, Subs, Factor (Profs. Kaltofen and Krishnamoorthy).
12–1:30pm	Sage Dining	Lunch served.
2pm–3:30	VCC South	Lab 5 (3n + 1 Problem).
4:30–6:00pm	BARH	Dinner served.

Saturday, July 29

1–4pm		Lab open house.

Sunday, July 30

Visitors' Day

2–4pm		Lab open house (Profs. Kaltofen and Krishnamoorthy).

WEEK 2

Monday, July 31

7–8:30am	Sage Dining	Breakfast served.
9–10:00am	Amos Eaton 214	Computer science research (Profs. Kaltofen and Krishnamoorthy).
10:15–noon	Amos Eaton 214	Computer Ethics—the Internet Worm (Profs. Kaltofen and Krishnamoorthy).

12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	Amos Eaton 214	Screening of Sneakers (joint with PipeLink)
4:30–6:00pm	BARH	Dinner served.

Tuesday, August 1

7–8:30am	Sage Dining	Breakfast served.
9–9:45am	Amos Eaton 214	Advanced Concepts in Maple—Modular Arithmetic and Recursion. (Profs. Kaltofen and Krishnamoorthy).
10–10:45am	Amos Eaton 214	Programming in Maple (M. Hitz).
10:45–11:30am	Amos Eaton 214	Career Discussion with Graduate Students (joint with PipeLink).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Labs 6 and 7 (Integer factoring,Internet home pages in HTML).
4:30–6pm	BARH	Dinner served.
7–9pm		Optional lab open hours (Profs. Kaltofen and Krishnamoorthy).

Wednesday, August 2

7–8:30am	Sage Dining	Breakfast served.
9–10:00am	Amos Eaton 214	Computer Viruses II (Profs. Kaltofen and Krishnamoorthy).
10:15–11:30am	Amos Eaton 214	Geometry in Maple (Profs. Kaltofen and Krishnamoorthy).
12–1:30pm	Sage Dining	Lunch served.
1:30–3:30pm		Visit to selected labs on campus (joint with PipeLink).
4:30–6:00pm	BARH	Dinner served.
7–9pm		Optional lab open hours.

Thursday, August 3

7–8:30am	Sage Dining	Breakfast served.
9am–10am	Amos Eaton 214	Presentation by Computer Science Graduate Student (joint with PipeLink).
10:15–11:30am	Amos Eaton 214	Geometry in Maple (Profs. Kaltofen and Krishnamoorthy).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Lab 8 (Geometry).
4:30–6:00pm	BARH	Dinner served.

Friday, August 4

7–8:30am	Sage Dining	Breakfast served.
9am–10:15am	Amos Eaton 214	How to spot a Trojan horse in a computer program (Profs. Kaltofen and Krishnamoorthy).
10:30–11:30am	Amos Eaton 214	Research Talk by Prof. J. Kay (CMU).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Lab 9 (Geometry).
4:30–6:00pm	BARH	Dinner served.

Saturday, August 5

1–4pm		Lab open house.

Sunday, August 6

Visitors' Day

2–4pm		Lab open house (Profs. Kaltofen and Krishnamoorthy).

WEEK 3

Monday, August 7

7–8:30am	Sage Dining	Breakfast served.
9–10am	Amos Eaton 214	Research Presentation by Computer Science Professor (joint with PipeLink).
10:15–11:30am	Amos Eaton 214	Geometry in Maple (Profs. Kaltofen and Krishnamoorthy).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Lab 10 (Pascal triangle and Magic Square).
4:30–6:00pm	BARH	Dinner served.

Tuesday, August 8

7–8:30am	Sage Dining	Breakfast served.
9–10:30am	Amos Eaton 214	Public key crypto systems and the Clipper chip controversy (Profs. Kaltofen and Krishnamoorthy).
10:45–11:30am		Proof of the RSA method (Profs. Kaltofen and Krishnamoorthy).
12–1:30pm	Sage Dining	Lunch served.
1:30–3:00pm	Amos Eaton 214	Team work experiment.
4:30–6:00pm	BARH	Dinner served.

Wednesday, August 9

7–8:30am	Sage Dining	Breakfast served.
9–10am	Amos Eaton 214	Signature schemes (Profs. Kaltofen and Krishnamoorthy).
10:15–11:30am		Undergraduate Research Presentations (joint with PipeLink).
12–1:30pm	Sage Dining	Lunch served.
1:30–4:30pm	VCC South	Final project (signatures via RSA).
4:30–6pm	BARH	Dinner served.

Thursday, August 10

7–8:30am	Sage Dining	Breakfast served.
9–9:30am	Amos Eaton 214	Research Presentation by a Computer Science Professor (joint with PipeLink).
9:45–11:15am	Amos Eaton 214	Career Choices (Profs. Kaltofen and Krishnamoorthy).
11:30–2:30pm		Field Trip to GE (joint with PipeLink).
4:30–6pm	BARH	Dinner served.

Friday, August 11

9–11am	Amos Eaton 214	Evaluation of the program. Random drawing for donated prizes.
11-11:30am		Closing Ceremony.
12–1:30pm	Sage Dining	Lunch served.
4:30–6:00pm	BARH	Dinner served.

Saturday, August 12

8am–12		Check out. All students must vacate their rooms by noon.