Final Program of NATO ASI
"Self-Assembly, Pattern Formation and Growth Phenomena in Nano-Systems"
(PST.MD.ASI 980684)

August 28

morning and afternoon: arrival of participants
evening: get-together reception

August 29

9 a.m. Prof. M. Frank-Kamenetsky. First lecture on physics of DNA.
11 a.m. Prof. A. Nepomnyashchy. First lecture on general aspects of pattern formation.
2 p.m. Prof. A. Nepomnyashchy. Second lecture on general aspects of pattern formation.
5 p.m. - 8 p.m. Computer classes and discussions between lecturers and students.

August 30

9 a.m. Prof. M. Frank-Kamenetsky. Second lecture on physics of DNA.
11 a.m. Dr. A. Neimark. First lecture on phase transitions in nanoscale systems.
2 p.m. Dr. A. Neimark. Second lecture on phase transitions in nanoscale systems.
5 p.m. - 8 p.m. Computer classes and discussions between lecturers and students.

August 31

9 a.m. Prof. P. Coullet. First lecture on general aspects of nonlinear dynamics.
11 a.m. Prof. L. Kramer. First lecture on fronts and droplets in non-equilibrium systems.
2 p.m. Prof. A. Buka. First lecture on self-organization and pattern formation in liquid crystals.
5 p.m. - 8 p.m. Computer classes and discussions between lecturers and students.

September 1

9 a.m. Prof. P. Coullet. Second lecture on general aspects of nonlinear dynamics.
11 a.m. Prof. L. Kramer. Second lecture on fronts and droplets in non-equilibrium systems.
2 p.m. Prof. A. Buka. Second lecture on self-organization and pattern formation in liquid crystals.
5 p.m. - 8 p.m. Computer classes and discussions between lecturers and students.

9 p.m. Lecture recital: *Beethoven's last sonatas Op. 110 and 111.*
Lecturer/pianist: William Kinderman

September 2

9 a.m. Prof. P. Chaikin. First lecture on nano-structures in polymer films.
11 a.m. Dr. I. Aranson. First lecture on nonlinear dynamics of nano-particles.
2 p.m. Prof. V. Volpert. First lecture on pattern formation in frontal polymerization.
5 p.m. - 8 p.m. Computer classes and discussions between lecturers and students.

September 3

9 a.m. Prof. P. Chaikin. Second lecture on nano-structures in polymer films.
11 a.m. Dr. I. Aranson. Second lecture on nonlinear dynamics of nano-particles.
2 p.m. Prof. V. Volpert. Second lecture on pattern formation in frontal polymerization.
5 p.m. - 8 p.m. Collaborative work between lecturers and students.

9 p.m. Lecture recital: *Beethoven's Diabelli Variations Op. 120.*
Lecturer/pianist: William Kinderman

September 4

Free day.
morning and afternoon: excursions, hiking, rest.
evening: Round Table Discussion: important problems in nano-science and nano-technology.

September 5

9 a.m. Prof. B. Matkowsky. First lecture on spatiotemporal pattern formation in solid and gaseous combustion.
11 a.m. Prof. S. Davis. First lecture on morphological instabilities.
2 p.m. Prof. A. Golovin. First lecture on self-assembly of quantum dots in solid films.
5 p.m. - 8 p.m. Computer classes and discussions between lecturers and students.

September 6

9 a.m. Prof. B. Matkowsky. Second lecture on spatiotemporal pattern formation in solid and gaseous combustion.
11 a.m. Prof. S. Davis. Second lecture on morphological instabilities.
2 p.m. Prof. A. Golovin. Second lecture on self-assembly of quantum dots in solid films.
5 p.m. - 8 p.m. Computer classes and discussions between lecturers and students.

September 7

9 a.m. Prof. L. Pismen. First lecture on nano-patterns in reaction-diffusion systems.
11 a.m.-2 p.m. free time
2 p.m. Prof. Y. Pomeau. First lecture on molecular forces and capillary phenomena.
3:30 p.m. - 7 p.m. Collaborative work between lecturers and students.

September 8

9 a.m. Prof. L. Pismen. Second lecture on nano-patterns in reaction-diffusion systems.
11 a.m. Prof. Y. Pomeau. Second lecture on molecular forces and capillary phenomena.
2 p.m. - 7 p.m. Collaborative work between lecturers and students.

September 9

9 a.m. Prof. R. Goldstein. First lecture on individual and collective dynamics of bacteria.
2 p.m. - 7 p.m. Collaborative work between lecturers and students.

September 10

9 a.m. Prof. R. Goldstein. Second lecture on individual and collective dynamics of bacteria.
2 p.m. - 7 p.m. Progress reports by students

September 11

9 a.m. – **noon** Progress reports by students.
2 a.m. – **5 p.m.** Progress reports by students.
6 p.m. ASI adjourns.