

**4th SIGRAV GRADUATE SCHOOL ON CONTEMPORARY  
RELATIVITY AND GRAVITATIONAL PHYSICS**

**and**

**2001 SCHOOL ON ALGEBRAIC  
GEOMETRY AND PHYSICS (SAGP2001)**

**Villa Olmo (Como, Italy), May 7–11, 2001**

**Programme**

**Monday, May 7**

- 9:00 Registration
- 9:30 A. Lerda, ‘Introduction to branes’ (I)
- 10:30 A. Grassi, ‘Large N dualities and transitions in geometry’ (I)
- 11:30 Break
- 12:00 K. Fukaya, ‘Deformation theory, homotopical algebra, Floer homology and mirror symmetry’ (I)
- 13:00 Lunch break
- 14:45 C. Gómez, ‘Geometry of tachyons in string theory’ (I)
- 15:45 M.H. Saito, ‘Relative Lefschetz action and BPS state counting via moduli of sheaves’ (I)
- 16:45 Break
- 17:00 Y. Stanev, ‘Two-dimensional conformal field theory on open and un-oriented surfaces’ (I)
- 19:00 Welcome buffet

**Tuesday, May 8**

- 9:00 A. Lerda, ‘Introduction to branes’ (II)
- 10:00 C. Gómez, ‘Geometry of tachyons in string theory’ (II)
- 11:00 Break
- 11:30 K. Fukaya, ‘Deformation theory, homotopical algebra, Floer homology and mirror symmetry’ (II)
- 12:30 Lunch break
- 14:30 A. Grassi, ‘Large N dualities and transitions in geometry’ (II)
- 15:30 A. Takahashi, ‘Relative Lefschetz action and BPS state counting via moduli of sheaves’ (II)
- 16:15 Break
- 16:45 C. Gómez, ‘Geometry of tachyons in string theory’ (III)

### **Wednesday, May 9**

- 9:00 A. Lerda, ‘Introduction to branes’ (III)
- 10:00 A. Grassi, ‘Large N dualities and transitions in geometry’ (III)
- 11:00 Break
- 11:30 K. Fukaya, ‘Deformation theory, homotopical algebra, Floer homology and mirror symmetry’ (III)
- 12:30 Lunch break
- 14:30 C. Gómez, ‘Geometry of tachyons in string theory’ (IV)
- 15:30 A. Mavlyutov, ‘String cohomology via intersection cohomology and mirror symmetry’
- 16:10 Break
- 16:30 E. Gasparim, ‘Instanton charges and singularities of plane curves’
- 17:10 Y. Stanev, ‘Two-dimensional conformal field theory on open and un-oriented surfaces’ (II)

### **Thursday, May 10**

- 9:00 A. Lerda, ‘Introduction to branes’ (IV)
- 10:00 A. Grassi, ‘Large N dualities and transitions in geometry’ (IV)
- 11:00 Break
- 11:30 K. Fukaya, ‘Deformation theory, homotopical algebra, Floer homology and mirror symmetry’ (IV)
- 12:30 Lunch break
- 14:30 C. Gómez, ‘Geometry of tachyons in string theory’ (V)
- 15:30 A. Galajinsky, ‘A heterotic N=2 string with space-time supersymmetry’
- 16:10 Break
- 16:40 Y. Stanev, ‘Two-dimensional conformal field theory on open and un-oriented surfaces’ (III)

### **Friday, May 11**

- 9:00 A. Grassi, ‘Large N dualities and transitions in geometry’ (V)
- 10:00 Y. Stanev, ‘Two-dimensional conformal field theory on open and un-oriented surfaces’ (IV)
- 11:00 Break
- 11:30 A. Lerda, ‘Introduction to branes’ (V)
- 12:30 Lunch break
- 14:30 K. Fukaya, ‘Deformation theory, homotopical algebra, Floer homology and mirror symmetry’ (V)
- 15:30 Y. Stanev, ‘Two-dimensional conformal field theory on open and un-oriented surfaces’ (V)