

International Scientists' Club  
Russian Academy of Natural Sciences  
Saint-Petersburg Department of Physical Society  
International Academy of Information Communication and Control  
Saint-Petersburg Mining Engineers' Society  
Nevsky Institute of Languages and Culture  
Russian Geological Society  
Russian Geographical Society

**INTERNATIONAL CONGRESS-2006  
FUNDAMENTAL PROBLEMS OF NATURAL SCIENCES AND  
ENGINEERING.**

*August, 14 - 19, 2006, Saint-Petersburg, Russia.*

**INVITATION**

Dear Colleague!

We are pleased to inform you that the next International Scientific Congress-2006 "FUNDAMENTAL PROBLEMS OF NATURAL SCIENCES AND ENGINEERING" will take place in Saint Petersburg, Russia August 14 - 19, 2006.

A discussion on modern theoretical, experimental and engineering problems in different areas of Natural Science and Engineering is supposed to be under consideration. The organising committee believes that time for investigations devoted to the deeper understanding of reality and comprehension of scientific achievements about nature and society has come.

**PROBLEMS TO BE DISCUSSED:**

1. Fundamental approaches to the cognition of reality.
2. Organising levels, elements and structure of objects in natural science.
3. Problems of time and space.
4. Etherodynamics, electrodynamics and gravitation
5. Energy, engineering and technologies of the new Millennium.

Catharsis conference – "Steps to New Civilization".

Plenary sessions are to be devoted to reports on fundamental problems selected by organising committee and summaries of poster and section sessions.

In addition to reports at plenary and section sessions poster sessions will be also held. They are one of the most important and effective working forms of the Congress-2006. Participants of poster sessions will have place and time for discussions with scientists interested in their report. At the same time every participant will have an opportunity for personal meetings with posters reporters.

The working languages are Russian and English, simultaneous (vice-versa) translation will be provided. Plenary sessions and perhaps some section meetings are to be transmitted over Internet-TV.

Plenary and poster sections will be held at the Nevsky Institute of Languages and Culture, St.-Petersburg, Bolshaya Raznochinnaya str., 27. Metro station "Chkalovskaya".

Participants who inform organising committee of the date, time and flight number of their arrival before July 1 will be met at the airport.

Best wishes

Chairman, prof.



A.P. Smirnov

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### ORGANISING COMMITTEE CONTACTS:

190031, Saint-Petersburg, Lygovsky prosp. 44

E-mail: [smirnov@shaping.org](mailto:smirnov@shaping.org), [klyushin@shaping.org](mailto:klyushin@shaping.org), [mchubey@gao.spb.ru](mailto:mchubey@gao.spb.ru). Theme: congress-

2006

Internet: <http://www.physical-congress.spb.ru>

## **INFORMATION FOR PARTICIPANT**

### **1. Registration Form and Passport Data.**

Participants should inform the organising committee about their intention to attend the congress. To do so, please, fill in the enclosed Registration Form and send out the appropriate information by regular mail or E-mail.

In order to apply for your visa at our end we need a faxed copy of your passport as well as those of all persons accompanying you. It should be a copy of the passport unfolded at the page(s) containing all passport data (see the enclosed Registration Form) as well as the photo. We would like you to send us such passport copy(-ies) together with the Registration Form. Since the visa application procedure might take rather a long time, we expect to get the Registration Form together with passport data and faxed passport copy(-ies) from you before May 1st, 2006.

### **2. Abstract of Your Paper for Presentation.**

You are expected to send us an abstract of the paper you are going to present at the congress. All submitted materials should be in English. The abstract will be published in the programme of the congress. The abstract volume must not exceed 1500 characters approx. (half a page of the size A4). The abstract must be sent to us as an electronic document, i. e. on a computer diskette or by E-mail. If your abstract contains equations you are strongly recommended to send the abstract by conventional post too, since equations are subject to distortion on different computers with different software installed. For requirements to all materials submitted to the organising committee for publication either in the proceedings or on Internet see the enclosed instructions. We expect to get your abstract by May 1st, 2006. Publication of abstracts sent in after April the 1st cannot be guaranteed.

### **3. Full Text of Your Paper for Presentation.**

You ought to send us the full text of your paper to be subsequently published in the congress proceedings (printed or recorded on CD) or on the Internet. The full paper must be sent to us as an electronic document, i. e. on a computer diskette or by E-mail. If your paper contains equations you are strongly recommended to send the paper by conventional mail too, since equations are subject to distortion on different computers with different software installed. For requirements to all materials submitted to the organising committee for publication either in the proceedings or on Internet see the enclosed instructions. We expect to get the entire text of the paper you are going to present by May 1st, 2006.

The papers get before the 1<sup>st</sup> of May 2006 will be included in the collection of Congress proceedings, which is going to be printed by the moment of the Congress' conducting. The papers sent after the 1<sup>st</sup> May 2006 will be published in the autumn 2006.

### **4. Proceedings of the Congress.**

- Book of the congress proceedings.  
The book is due to appear by the moment of Congress' conducting (provided that all participants of the congress submit their papers for publication on time). The paper to be published should be submitted by May 1st, 2006 and must meet the requirements listed in the enclosed instructions. Publication charges are listed in the Registration Fee and Other Expenses section. As soon as the book is printed a free copy of it will be sent to each author.
- Proceedings of the congress on the Internet.  
Papers submitted for publication in the printed version (and CD) may also be placed on the congress's Internet site.

### **5. Requirements to All Materials Submitted for Publication.**

The present rules are applicable to any electronic and printed materials submitted to the organising committee for further publication:

- in the book of proceedings
- over the Internet.

Compulsory terms:

- Papers must be stored on a diskette in the Microsoft Word word processor format.
- Equations must be embedded into text and entered by means of the Microsoft Equation 3.0 equations editor. This is the most common equations editor which is usually installed on computer together with the Microsoft Word word processor.

- Pictures must be stored on diskette in the GIF format and embedded in the article's text.

See the enclosed sample sheet for more requirements the materials must meet.

Mind that when placing on the Internet a paper abundant in equations, insignificant but unfortunately inevitable distortions may occur due to shortcomings Internet to the process of conversion from the equations' source format to the format suitable for the Internet. Most typical distortions are equations shift up with respect to the text baseline and a certain blur or slight shade. In so doing equations themselves are not distorted.

## 6. Available Equipment

Lecture rooms of the congress are equipped with the following facilities:

- Overhead projector (to demonstrate materials on sheets of transparent film).
- Videocassette and video CD player.
- Slide and diskette projector.
- Poster stands.
- Blackboard and chalk.
- Personal computers.

## 7. Accommodation and Meals. Entertainment/Leisure-Time.

Participants are provided with accommodation and meals in hotels of St.-Petersburg. Approximate prices: 100-250 USD.

Do not forget to let us know the flight number as well as the exact date and time of your arrival to St.-Petersburg not later than 1<sup>st</sup> July 2006. This is necessary for us to pick you up at the airport.

## 8. Registration Fee and Other Expenses

The registration fee entitles participants to take part in all activities of the congress and covers a printed programme of the congress, book of abstracts, visa application duties (at our end), simultaneous translation at the congress sessions, transport from and to the airport. You may also pay in advance for accommodation and meals if you know for sure how many days you are going to spend at the congress.

Registration fee:

If paid before May 1, 2006:

Participant:	300€ 350 USD
Student:	150€ 180 USD
Accompanying person:	100€ 120 USD

If paid after May 1, 2006

Participant:	350€ 420 USD
Student:	170€ 200 USD
Accompanying person:	125€ 150 USD

Paper publication in printed proceedings (per page, see the enclosed instructions for required page size):

15€ 18 USD

Additional editor's work (see the enclosed requirements for submitted papers):

5€ 6 USD

Paper publication on the Internet (per page, see the instructions for required page size):

5€ 6 USD

Placement of the Real-Video record of your speech on the Internet site of the congress:

150 USD

Payments should be made in Euro or in US dollars (USD) in one of the following ways:

- In cash on arrival.
- Through the Western Union facilities in favour of J. G. Klyushin, Budapeshtskaya st. 5-3-241, 192242 St.-Petersburg, Russia, home phone: +7(812) 774-88-48. Please, ask the Western Union to notify J. G. Klyushin by phone upon arrival of payment and inform him by e-mail.
- By transfer to the organising committee's bank accounts which are as follows:  
Bank account number for payments:

Bank of New York № 890-0057-610 SWIFT code IRVTUS3N  
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To beneficiary account 4230184075510000104901 (USD)  
Account 42301978955100000123 (Euro)  
in favour of Klyushin Jaroslav Grigoryevich.

# INSTRUCTION FOR PREPARING OF THE SCIENTIFIC PAPERS FOR THE CONGRESS “FUNDAMENTAL PROBLEMS OF NATURAL SCIENCES AND ENGINEERING” PROCEEDINGS

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*The instruction on usage of a template has been built especially for preparing of the papers to issuing in Proceedings of the conferences with the help of the editor MS Office Word 1997 or 2000 or later version. The instruction is written with the purpose to help to the authors and Organizing committee to optimize the operations on issuing of Proceedings of conferences.*

## Introduction

Write the present template, obtained from Organizing committee, on your hard disk with the computer name «**Conf\_Proceedings.dot**». Hereinafter we are supposed, that the full path to the sent file will be such: C:\Windows\Application Data\Microsoft\Templates\Conf\_Proceedings.dot.

Print out the obtained file with your printer and read it.

The main purpose of present template is to supply all papers of the Proceedings by the united style. Observe, that in your available text the extra spaces between words (there should be only one space after any word, with rare exception) be deleted. Thus the sign of «transfer of a slide» — clicking the «Enter» key — should be put only at the end of the paragraph.

## The proper instruction of creation of the paper in the format of the conference Proceedings

### 1. Insertion of the available text

Run the WORD, close the built by default «Document 1», then from the Menu **File** select **Create**. From the offered templates list dialog select «**Conf\_Proceedings.dot**». In the again opened «Document 1» delete the text of the present description (**Edit, Select all, Delete**). Insert the available already your future paper text. Then from menu point **Service** select **automatic hyphenation**. Save your «Document 1» with suitable name. I hint you do repeated saving regularly, for example, after processing of every half of page.

#### 1. Frame of the article

The following order of arrangement of the elements of the text (frame of the article) is offered to all authors: a Title of the article (title), Author N., the Address (institute, domestic or service address, e-mail or site address), Abstract in English (if possible, in Russian) and the text structured on the paragraphs, sub-paragraphs and under-sub-paragraphs (if necessary). For example, Introduction with the history of the paper subject and formulation of the main task, the author's Method of the solving of the problem, Theory of a method, Implementation of a method, Controversy or interpretation of the author's outcomes and other authors one, Conclusions, References. All paragraphs can be numbered by Arabian, Latin digits with usage of the sign of the paragraph § or without, at the choice of the author.

All 16 styles are designed for usage of the **Times New Roman** font, size 10 points for the body text and page headers, 9 points for the abstract, captions of the tables both figures and list of the references, 8 points for footnotes. The tables, depending on their complexity, can be typed by a size 10, 9 or 8 points. The all styles have been titled by prefix **Conf\_** and followed to prefix the proper name with the evident function.

#### 2. Figures, tables, formulae

The caption to figures and charts must be placed below, to the tables on the top. The style of the figures and tables captions is unified and titled «**Conf\_caption\_Tabl\_Fig**». The tables should be made out, using

the menu point «**Table**», fitting the tables to the printable area of the page. If it is required, the broad table can be prepared in the separate file, having arranged the table in the landscape view.

The formulas should be typed only by **Editor of the formulas “Microsoft Equation 3.0”** with following parameters of the font sizes: customary – 10 pt, Large index – 7 pt, small-sized index – 6 pt, Large character – 10 pt, small-sized character – 8 pt. The vector and matrix symbols must be typed by straight bold font, the Greek characters and trigonometrical functions are typed by straight light font, and other variables and functions by inclined light ones. The example of the typing of the formulas group (1) contains these set-up. Open (1) and customize your Editor of the formulas with parameters, at which the group of the formulas (1) was typed.

$$\left. \begin{aligned} \sum_{p=1}^{(1+B)^2} X_{nk}^{\sum k_p} = 1, \quad f(\theta, l) = l \sin 2\theta, \\ \vec{F} = m\vec{a}. \end{aligned} \right\} \quad (1)$$

The pasted figure must be separated from the text pursuant to its view.

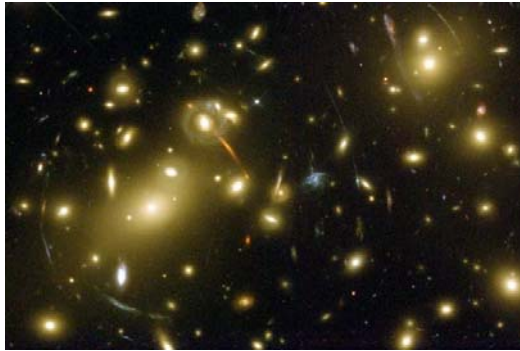


Fig. 1. Abell 2218: A Galaxy Cluster Lens [1].

## 2. Assigning of styles of the text elements

Highlight the title of your paper, select style «**Conf\_TITLE**» from the dialogue style window. Highlight analogously the Author Name text, select «**Conf\_Author**» and so on with all following elements of the text<sup>1</sup>. The footnotes in a template are supposed being indexed by unbroken numbering, but the author can change numbering symbol in accordance with his preferring.

Assign styles «**Conf\_ordinary\_text**» to the indentation or to the group of the indentions integrated in the paragraph. The «**Conf\_Formula**» is signed for the numbered or other separately standing in the line formulas collected in the *Editor of the formulas*. Default set up of the formula tabulation is 1 cm from the left site and 11 cm from the right. Use «Tab» key after selection.

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### The mailing order for files to Organising committee

Insert numbers of pages: menu **Insert, Numbers of pages, In the bottom of page, Outside, Number on the maiden page, To start with 1.**

Printing for the control you will receive your paper in the view, close to that, which it will have in the Proceedings.

Upon termination of your typing and formation of the text save the file in the RTF format. Attach to it all figures. If necessary, pack all files into one (or in multi volume) archive. Each of volumes must not exceed 1 MB.

<sup>1</sup> It is supposed that the text has been typed without spaces between lines, without doubled spaces between words, and without hyphenations inserted by hands, with correctly placed the end paragraph symbols. The Hyphenation is set up as available.

At impossibility for the author to satisfy with the present requirements at opening-up of the article it is possible to send it in the arbitrary form with additional charge 3 dollars per page, about what separately to indicate while transferring. Otherwise article will not be published. The text of the report should sent simultaneously.

#### REFERENCES

1. Andrew Fruchter (STScI) et al., WFPC2, HST, NASA <http://antwrp.gsfc.nasa.gov/apod/archivepix.html>  
Organizing committee of conference. October 15, 2001  
to three addresses: [smirnov@shaping.org](mailto:smirnov@shaping.org), [klyushin@shaping.org](mailto:klyushin@shaping.org), [mchubey@gao.spb.ru](mailto:mchubey@gao.spb.ru)

## REGISTRATION FORM

Title (Prof./Dr./Mr./Ms.), First Name, Last Name (Block letters):
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Single bed room (1 common bathroom for 2 rooms):			

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Hereby I grant the right for the organizing committee to publish my paper in the proceedings of the International Congress-2002 "Fundamental Problems of Natural Sciences and Engineering".

Signed: \_\_\_\_\_

Data