ITHEA International Scientific Society

ITA 2021

XXIV-th Joint International Scientific Events on *Informatics*
www.ithea.org

Summer Session: July 01 - July 10, 2021
Hotel "KORAL" in the resort "St. Constantine & St. Helena", Varna, Bulgaria
with Internet on-line sessions

Papers from ITA 2021 will be published by:

The ITHEA International Journal
"Information Theories and Applications" (IJ ITA)

The ITHEA International Journal
"Information Technologies and Knowledge" (IJ ITK)

The ITHEA International Journal
"Information Models and Analyses" (IJ IMA)

The ITHEA International Journal
"Information Content and Processing" (IJ ICP)

The ITHEA International Book Series
"Information Science and Computing" (IBS ISC)

The ITHEA International Digital Library with
Referative Scientific Index (RSI)

A Collection of best papers, written in English and presented at ITA 2021, will be sent for publishing at CEUR-WS.org, which is planned to be indexed in Scopus.

The ITHEA International Journals are indexed by DOI, Crossref, Worldcat, ROAD Directory of Open Access scholarly Resources, Google Scholar, CiteseerX, ITHEA, and are planned to be indexed in WoS.

ITA 2021 is organized by:

ITHEA International Scientific Society (ITHEA ISS)

Association of Developers and Users of Intelligent Systems (ADUIS)

Institute of Information Theories and Applications FOI ITHEA (Bulgaria)

University of Tlecomunnications and Post, Sofia (Bulgaria)

in tight collaboration with:

- Spanish Network on Biomolecular and Biocellular Computing (Spain)
- National Academy of Sciences of Ukraine
- FIS Foundations of Information Science (Spain)

- V.M.Glushkov Institute of Cybernetics of NASU (Ukraine)
- Institute for Informatics and Automation Problems, NAS (Armenia)
- Dorodnicyn Computing Centre of the Russian Academy of Sciences (Russia)
- St.Petersburg Institute for Informatics and Automation of RAS (Russia)
- Research Institute of Applied Semiotics of Tatarstan Academy of Sciences (Russia)
- Instituto Aragonés de Ciencias de la Salud (Spain)
- Institute of Informatics Problems of the RAS (Russia)
- Institute of Mathematics and Informatics of BAS (Bulgaria)
- Institute of Mathematical Problems and Systems of NASU (Ukraine)
- Institute of Mathematics of SD RAN (Russia)

- Universidad Politecnica de Madrid (Spain)
- Hasselt University (Belgium)
- University of Calgary (Canada)
- National Aviation University, Kyiv (Ukraine)
- Taras Shevchenko National University of Kyiv (Ukraine)
- New Bulgarian University, Sofia (Bulgaria)
- Ain Shams University, Cairo (Egypt)
- Rzeszow University of Technology (Poland)
- Educational-scientific complex "Institute for applied system analysis" (Ukraine)
- Kharkiv National University of Radio Electronics (Ukraine)
- Ben-Gurion University (Israel)
- Astrakhan State University (Russia)

ITA 2021 Conferences

KDS 2021   XXVII-th International Conference
Knowledge - Dialogue - Solution

CFDM 2021   XIII-th International Conference
Classification, Forecasting, Data Mining

i.TECH 2021   XIX-th International Conference
Information Technologies and Software Engineering

MeL 2021   XVI-th International Conference
Modern (e-) Learning

NIT 2021   XIII-th International Conference
Natural Information Technologies

IM 2021   XI-th International Conference
Informational Modeling

MIM 2021   XI-th International Conference
Mathematics of Informational Modeling

i-i-i 2021   XII-th International Conference
Information - Interaction – Intellect

KEBIDH 2021   VIII-th International Conference
Knowledge Engineering in BioMedical Informatics and Digital Health

CSAI 2021   VI-th International Conference
Cognitive Science - Approaches and Results towards Artificial Intelligence

INFOS 2021   XIV-th International Conference on
Intelligent Information and Engineering Systems

GIT 2021   XIX-th International Conference
General Information Theory

ISSI 2021   XV-th International Summer School on
Informatics

Deadlines for ITA 2021

For all summer session conferences:

June 30, 2021: reservation of hotel, submission of **registration forms** and **visa application forms**
by e-mail: office@ithea.org and office@hit-tourism.com

June 20, 2021: submission of proposals for ISSI **doctoral consortium** by e-mail: office@ithea.org

June 10, 2021: submission of **paper** by the ITHEA ISS Submission Web System: http://ita.ithea.org
submission of proposals for ISSI **workshops** by e-mail: office@ithea.org

June 20, 2021: notification of the **paper acceptance** by the ITHEA ISS Submission Web System
notification of the workshop **acceptance** to authors e-mail

Manuscripts

ITHEA rules for preparing the manuscripts are compulsory.

Responsibility for manuscripts published in ITHEA International Journals and Book Series belongs to authors. Please *get permission to reprint* any copyrighted material.

Not acceptable manuscripts will be returned to authors with recommendations. After authors' editing and refinement, if the manuscripts are reviewed positively, they will be published.

Manuscripts need to be formatted in DOC or TeX formats according the sample sheets given at:

- DOC template: http://www.ithea.org/conferences/ithea_doc_template.doc
- TeX template: http://www.ithea.org/conferences/ithea_tex_template.tex

Accepted manuscripts will be published by ITHEA$^®$ in the peer reviewed ITHEA International Journals:

  - "Information Theories and Applications" (IJ ITA);
  - "Information Technologies and Knowledge" (IJ ITK);
  - "Information Models and Analyses" (IJ IMA);
  - "Information Content and Processing" (IJ ICP).

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Submission

The camera-ready copy of the manuscript should be received by the ITHEA Conference Submission System (http://ita.ithea.org) or by the ITHEA Journal Submission System (http://ij.ithea.org); e-mail for questions: office@ithea.org.

Please observe the rules and deadlines!

Submit registration cards and visa forms to e-mail: office@ithea.org .

Fees (including 20% VAT)

Registration Fee is **EURO 180.**

Registration fee includes *participation fee* with presentation of one ***free online only published paper*** and *access* to all conference events.

Printed journal issue

One printed exemplar of a journal issue costs **EURO 90**.

Registration Fee for a PhD student is **EURO 90**.

Registration fee for Internation Summer School on Informatics includes *participation* for one PhD student and permits *presentation of one PhD* in ***Doctoral Consortium*** with *afterward online only publishing* and *access* to all conference events and ITHEA Evening.

Contact for ITA 2021: *office@ithea.org*

Accomodation for ITA 2021 Summer Session

HIT-Tourism Tur Operator, Varna, Bulgaria
Licence number: 04482
www.hit-tourism.com ;   e-mail: office@hit-tourism.com ;
+359 52 361 900;   +359 89945185 *Skype:* hit_mira

ITA 2021 HOTELS WITH SPECIAL DISCOUNTS
Resort "St. Constantine & St. Helena", Varna, Bulgaria

MAIN HOTELS
Hotel "**KORAL ******" **,** *ITA 2021 Conference place, 400m far from sea*
https://hotel-koral.com/
Hotel "**Gloria *****", *300m far from sea; 100m far from ITA 2021 Conference place*
http://gloria.golden-hotelbg.com/
Hotel "**Rusalka ****", *300m far from sea; 100m far from ITA 2021 Conference place*
http://www.hotelroussalka.com/

To use special hotels' prices with *discounts* from the official prices for all hotels, participants have to make reservation and payment *only* by HIT-Tourism Tour Operator.

It is possible to book in every hotel in the resort as well as in Varna town using special discounts for ITA 2021 if one book via "HIT Tourism" Tour Operator.
Before using any booking system, please ask ITA 2021 for actual prices.
As a rule, Booking.com, as well as other booking systems,
offers pices higher more than at least 15% than ours.

Transfer airport - hotel:
  − car (1-4 sits): EURO 24 per car *in one direction*;
  − minivan (4-7 sits): EURO 30 per bus *in one direction*.

Send your requests for reservation and questions
to both e-mails: *office@hit-tourism.com* and *office@ithea.org* .
If you not receive answer in a couple of days, please resend request!
NOTE: After pointed hotels' deadlines prices for booking will rise !

VISAS for ITA 2021

To receive Bulgarian visa for ITA 2021 Summer Session one has to have:
      - Voucher from HIT-Tourism Tur Operator for hotel accommodation. Send your requests for hotel reservation to both e-mails: office@hit-tourism.com and office@ithea.org .
      - Invitation letter from ITHEA. In order to obtain invitation letter, fill visa and registration forms and send them to office@ithea.org.
      - Other documents that Bulgarian embassy in your contry requires.

International passports must be *valid* at least **six months** after the conference time.

Please pay attention to rules for entering Bulgaria.
Possibly a valid COVID-19 vaccination sertificate or
a valid 72 hours old negative COVID-19 PCR test will be needed!

Important information for participants in ITA 2021, Varna, Bulgaria
Please read carefully!

1. Contacts

Mobile numbers of the Organizing committee to be used during conference time:
+359 878 89 07 07, +359 878 89 07 25

2. Travel to the conference

2.1. From Varna

The Hotel "KORAL" of the "St. Constantine and St. Helena" resort is located less than 7 km by the way from Varna to the "Golden Sands" resort.

From Varna Airport and Bus station: bus No.: 409 to bus stop "Botanical Garden" (Botanicheska gradina).

From Varna Town Center the busses are: No.: 8 to the Center of "St. Constantine and St. Helena" resort and No.: 9 to bus stop "Botanical Garden" (Botanicheska gradina).

Please, see the map on the next page.

2.2. From Sofia

Besides the direct flight to Varna and/or the transfer flight from Sofia, there are two possible variants to get from Sofia to Varna:

- by train from the Central Railway Station: www.bdz.bg
- by bus from the Central Bus Station (right beside the Central Railway Station: www.centralnaavtogara.bg)

2.3. In Sofia

The metropolitan line from the Sofia Airport to the Central Railway Station and the Central Bus Station is still under construction, so the transportation to these stations may be:

- By bus – 84 or 284 from the Airport to "Hotel Pliska" stop, and then 213 or 214 to the Central Station; Note: Luggage bigger than the average will require an extra ticket as well.
- Shuttle-bus: from the airport to the station. The price is 1.60 BGN (possible additional taxes for the luggage).
- Taxicab: **we do not recommend** using this transport, or in case you do always check the prices on the stickers on the windows, because the foreigners especially are often offered incredibly high prices.

3. Medicines

We want to remind if you use some special medicines not to forget them.

4. Currency

The fixed official exchange rate: 1 EUR = 1.95583 BGN (leva).

In the change offices the exchange rate may vary from 1.9 to 1.95.

When you change money, please be careful when choosing the change office. At the airport usually the rates are not preferable.

Some change offices use on their front tables fixings which aren't used for the standard procedures – it might be for write the fixing on the front table, which is not the real rate for usual exchange (it may be the rate for checks or for exchanged amount more than 10,000 lv.). Please, always read the all the notices (usually written with smaller letters) and ask the clerk for the exact total you'll receive from the exchange.

We recommend exchanging not more than 50 EUR or USD at a time.

Caution!

Be careful with your money, documents and other important personal belongings.
Make sure you keep them safe with yourself, not putting them in your luggage, as you can easily become a victim of pickpockets or thieves otherwise.
Please be alert in the city public transport as well as in the bus/train when approached by strangers and never leave your baggage unattended.