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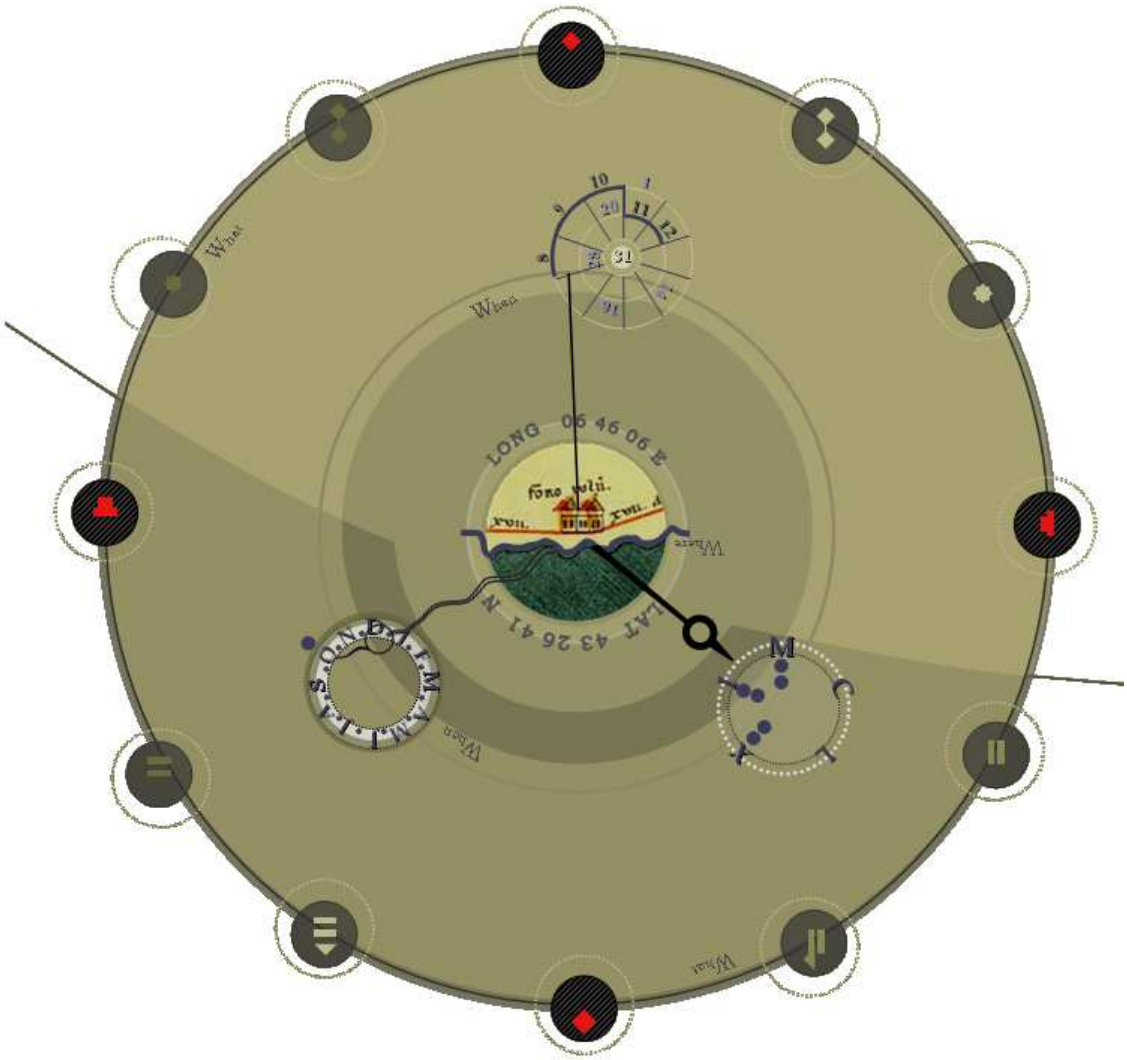
MOVE_REAL 2012 Workshop & tutorials



Thematic School on Modelling and visualising spatial dynamics: Reasoning on long time spans and uncertainty

Fréjus (France / Var)
8-12 October 2012

CONTEXT AND OBJECTIVES

Analysing and understanding spatial dynamics raises, in the context of historic sciences, a number of open issues, both methodological and technological. The very nature of inputs handled in historical investigations – *imperfect* raw data, pieces of information, pieces of knowledge - often undermines efforts to produce reasoning, or to implement instruments for analysis.

These issues are naturally primarily raised in disciplines in and around history, where analysts try to depict spatial dynamics that cover long time spans - may they concern anthropic changes or a natural phenomenon. But they in parallel question the biases, formalisms and solutions offered today by informatics and information sciences.

Contemporary analyses of spatial dynamics, at scales ranging from the edifice to the territory, tend to rely massively on technological solutions and computer science formalisms that are more and more at the heart of our scientific practices, but that in parallel sometimes also appear as more and more divergent. In addition, scientific communities that are brought to carry out such analyses often do with divergent objectives, methods, and scientific cultures.

Accordingly, a risk exists to see recent breakthroughs (in terms of concepts, methods, tools) act as yet another factor of dispersal, weakening the scientists' capacity to foster a better global understanding of how to handle spatial dynamics, in the context of historic sciences.

The "Modelling and visualising spatial dynamics" thematic school offers scientists from various communities an opportunity to discuss theoretical and practical approaches that remain today often distributed across independent communities (by scale, by tool, by original discipline, *etc*.), thereby often invisible to one another. The event's intent is accordingly to try and temporarily bridge the gap between historic sciences, geosciences, computer science and information sciences. It should allow researchers, teachers cum researchers, PhD students and practitioners with the above background to better circumscribe some of the conceptual / technological solutions available today when handling spatial dynamics that cover long time spans, in the context of irreducible uncertainty.

WHAT IS A THEMATIC SCHOOL?

A "thematic school" is originally a continuing education seminar-like event funded by the French National Centre for Scientific Research for its staff. Yet it is open more widely to all scholars researchers interested by the theme, its aim being to foster close scientific exchanges and transfers of knowledge and know-how. Accordingly, the programme includes theoretical interventions (invited speakers from various disciplines, and various countries) as well as demos, tutorials and sessions in workgroups.

Thematic schools differ from traditional workshops by the fact that invited speeches, tutorials and practical classes are closely intermingled all along the event, and by the fact that participants are hosted on the event's site in a so-called "residential" format.

EVENT FOCUS

Discussions will focus on two fundamental issues when studying spatio-historical dynamics, *i.e.* spatial dynamics that are analysed under the constraints of historical sciences:

- Understanding and modelling the time variable: how can time-related doubts and uncertainty be clarified and instrumented?
- Bridging the gap between spatial dynamics and Information Visualisation: how can insight into dynamics of change be gained, in the specific context of historical sciences, using concepts & means from the Information visualisation & visual analytics communities?

The event's theme and programme should allow participants to better identify and measure similarities and differences in the way events, processes, and transformations are handled across various

disciplines, with various real cases, datasets and research goals. Theoretical approaches, records of experiences, practical classes should shed an interdisciplinary light on how dynamics of change on long time spans, with and multiple heterogeneous uncertainty, can be dealt with.

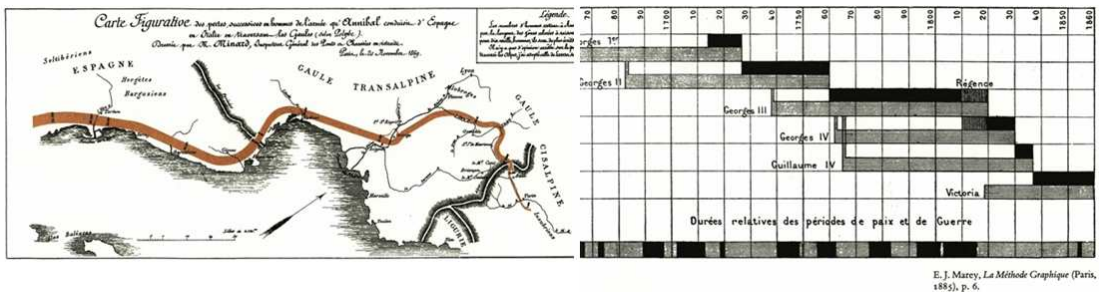
Participants will be invited to present their own research & interests in a short introduction session, and optionally may propose a paper for publication on the event's associated online journal. Invited speeches will also be available as papers or presentations in order to foster post-event, mid-term reuses of its inputs and outcomes.

PUBLIC, PROFILES:

The MOVE_REAL 2012 Workshop & tutorials is an interdisciplinary event: it is dedicated to researchers, teachers cum researchers, scholars and specialists in geosciences, historical sciences and information sciences, or more generally speaking to scientists dealing with processes in which time and space play a central role. Participants, although they will be invited to present their own research, will not be selected on the basis of this contribution, but on the basis of their concern for the issues to be discussed.

Because the programme focuses *both* on modelling *and* visualising *spatio-historical* dynamics, it should be of interest for a wide range of profiles, representing scientific communities or research challenges that remain today often split:

- *Archaeology, Architecture, History of art and architecture*
- *Cartography, History of cartography, animated cartography, graphic semiology*
- *Computer graphics, 2/3D interfaces*
- *Databases & Information systems*
- *Geographic information science, spatial analysis*
- *Information visualisation, Knowledge visualisation*
- *Knowledge modelling, ontology for space or time-oriented data*
- *Multi-scalar spatial data sets and analysis*
- *Spatial and spatio-temporal data modelling. and management*
- *Techniques for surveying / processing 3D data*
- *Topology, Lighting, Reconstruction issues in 3D scenes*
- *Urban studies, ethnology, spatial anthropology*
- *Uncertainty in spatial or temporal data sets*
- *Visual analytics, visual reasoning*



E. J. Marey, *La Méthode Graphique* (Paris, 1885), p. 6.

Reasoning on space, reasoning on time, correlating time-oriented data - a legacy (C.J Minard, E.J Marey)

Sessions at the MOVE_REAL 2012 Workshop & tutorials will be held either in French or in English.

REGISTRATION

Due to the fact that all invited speakers and participant are hosted on the event's site, the number of participants is limited. Therefore the timetable comprises a selection procedure that will start on 08 June. We invite scientists interested to contact us as soon as possible.

An early-bird pre-registration form can be downloaded from the Workshop's Web Site. Please fill it out and send us by e-mail by 08 June. (Send it at the e-mail address that figures in the form)

<www.map.archi.fr/modys>

Registration fees are as follows:

- *Students: 450 €*
- *Others : 550 €*

These registration fees **cover a full-board accommodation on the event's residential facility for the whole duration of the event**, as well as access to all sessions, and the didactic material provided to participants (inputs / outcomes, material for the practical classes and the recurrent sessions).

COMITE SCIENTIFIQUE

(preliminary list)

W. Aigner	*Information Engineering Group, TU Wien, Vienna (AT)*
R. Billen	*ULg Université de Liège (BE)*
F. Bertoncello	*UMR 6130 CEPAM, Nice (FR)*
J.Y. Blaise	*UMR 3495 MAP CNRS/MCC, Marseille (FR)*
I. Dudek	*UMR 3495 MAP CNRS/MCC, Marseille (FR)*
C. Garbay	*UMR 5217 LIG Laboratoire d'Informatique de Grenoble (FR)*
L. Kaddouri	*UMR 7300 ESPACE, Avignon (FR)*
W. Kienreich	*Know-Center, Graz (AT)*
B. Lefebvre	*UMR 5608 TRACES, Toulouse (FR)*
J. Ma	*School of Computing and Mathematical Science, University of Greenwich (UK)*
D. Meneveaux	*Département SIC UMR 6172 XLIM CNRS/Université de Poitier s(FR)*
P. Ozimek	*Institute of Informatics, Technical University, Krakow (PL)*
N. Poirier	*Université de Toulouse II-Le Mirail, (FR)*
X. Rodier	*UMR 6173 CITERES / LAT, Tours (FR)*
V. Sabol	*Know-Center, Graz (AT)*
L. Saligny	*USR 3516 MSH, Dijon (FR)*

ORGANISERS, CONTACTS:

Scientific responsibility : I. Dudek, J.Y. Blaise

Organisers : M. Chataignier, I. Dudek, J.Y. Blaise, X. Rodier, L. Kaddouri

Contacts : mch@map.archi.fr, idu@map.archi.fr, jyb@map.archi.fr

Web site : *<www.map.archi.fr/modys>*

FUNDED BY:

An **initiative** of the MoDyS research group **(GDR 3359 MoDyS)**
<http://isa.univ-tours.fr/modys/index.php>

Supported by two **CNRS institutes**:
Institute for Humanities and Social Sciences (INSHS)
<http://www.cnrs.fr/inshs/# >
Institute for Information Sciences and Technologies (INS2I)
<http://www.cnrs.fr/ins2i/ >

Supported by the MAP research unit **UMR 3495 MAP CNRS/MCC**
<http://www.map.archi.fr>

Supported by the ISA network
<http://isa.univ-tours.fr>

DIDACTIC MATERIAL

Didactic material and outcomes of the interactive tutorials/practical classes will be published for further use on the event's web site and will contribute to a Wiki dedicated to its research issues.

CONTRIBUTIONS

Participants will be invited to present their own research & interests in a short introduction session, and optionally may propose a paper for publication on the event's associated online journal.

Invited speeches will also be available as papers or presentations in order to foster post-event, mid-term reuses of its inputs and outcomes.

RESOURCES & DOWNLOADS

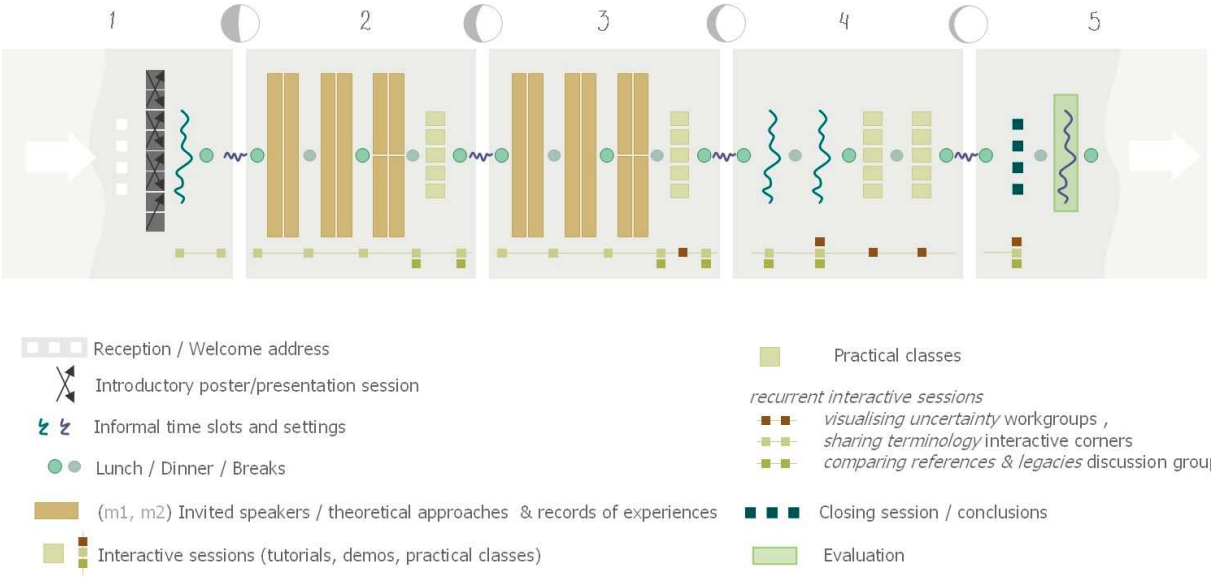
A directory of resources will be available as a result of the event.

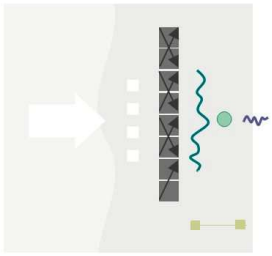
PROGRAMME HEADLINES

The MOVE_REAL 2012 Workshop & tutorials combines three types of sessions:

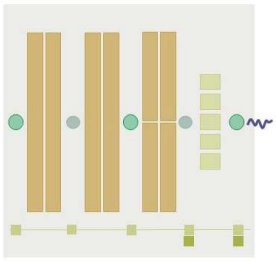
- Invited talks in which theoretical approaches as well as records of experiences will be presented in a classic conference-like format. These talks are distributed as follows: one day dedicated to modelling issues, and another to visualisation issues.
- Recurrent interactive sessions distributed all along the event in which formal and informal workgroups will address issues such as visualising uncertainty, legacies and references that can be shares across disciplines, or understanding one another's interpretation of some transversal notions like transformation, processes, representation (*etc*.).
- Practical classes (structured data sets on the event's site and its history, proposed as test field) helping participants to try and weigh in what visual analytics concepts and methods can help reasoning on long time spans and uncertainty.

The programme also includes an introductory poster/presentation session (day1) during which each participant will be given time to present his research, so as to quicken contacts, underline common interests, and set the pace for further exchanges. In addition, some informal time slots are left open for participants to contribute by other means if they wish (demos for instance), and thereby interact with the organisation.

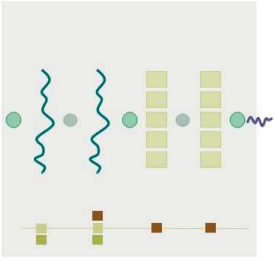




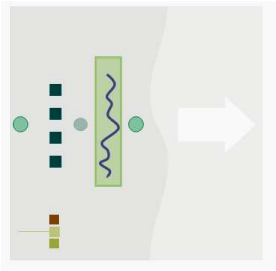
On ***the first day*** the event's reason to be and objectives will be presented - but the programme also includes an introductory poster/presentation session (day1) during which each participant will be given time to present his research, so as to quicken contacts, underline common interests, and set the pace for further exchanges.



The next two days will be dedicated for the former to modelling issues and for the latter to visualisation issues. There will be four to six invited talks in full sessions, and then two parallel sessions on records of experiences. Practical classes will conclude those two days.



Practical classes will be resumed during ***the fourth day***, along with group discussions and work sessions (recurrent interactive sessions). In addition, some informal time slots are left open for participants to contribute by other means if they wish (demos for instance), and thereby interact with the organisation.



On ***the last day*** recurrent interactive sessions will be analysed, and the event evaluated.

SOCIAL EVENTS

A half-day hiking tour to the Dramont semaphore can be organsised for participants on demand (programme to be announced).

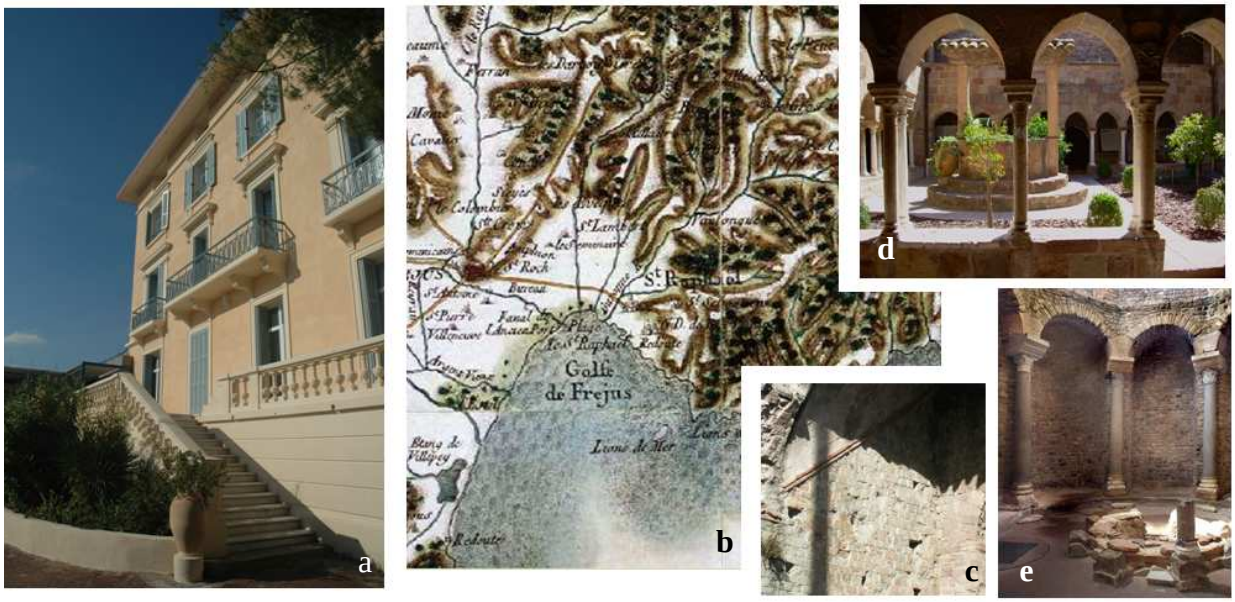
Photos : M. Hamza, *CAES CNRS*

DATES & LOCATION

When: **8-12 October 2012**
The workshop will start in the late afternoon on Monday 8th October (reception 15:00–16:30) and will end in the early afternoon on Friday 12th October.

Where : **Villa Clythia** (centre CAES du CNRS), **Fréjus, Var**
2754 Avenue Henri Giraud, 83600 Fréjus
43°N 26' 42.1" 6° E 46' 5.0"
<http://www.caes.cnrs.fr/vacances/nos-villages/la-villa-clythia>

Localisation:
65 km from Nice
450 km from Lyon
142 km from Marseille



The MOVE_REAL 2012 Workshop & tutorials location:
(a,f,h) Villa Clythia (source CAES CNRS & organisers) – the residential facility. (b) The Gulf of Fréjus - represented on Cassini's XVIIIth century; (c,d,e,g) Details of the Episcopal compound, of the baptistery, and of the roman arena in Fréjus (Sources Wikipedia & organisers). (i) Les calanques (source CAES CNRS)

How to get there:

→ by plane :

- Airport Nice Côte d'Azur (60 km)
  <http://en.nice.aeroport.fr/>
  than by:
  Bus from the airport : Terminal 1 / quai 5, line 3003 destination - Saint-Raphaël
  Transporter : SOCIETE DES LIGNES DU VAR, *<www.varlib.fr>*
  You can buy a ticket in a bus (one-way ticket 15 €).
  timetable: VARLIB_3003.pdf *<http://www.varlib.fr/cg83/Horaires_des_lignes_du_reseau_VarLib>*

  taxi : from the airport to Fréjus
  <http://www.nice.aeroport.fr/Passagers/Acces-plans-et-parkings/Transports-publics/Taxis-nicois#Prix>

- Airport Marseille Provence (150 km)
  (Bruxelles, London, Paris, Munich,…)
  <http://www.mrsairport.com/eng/index.jsp>

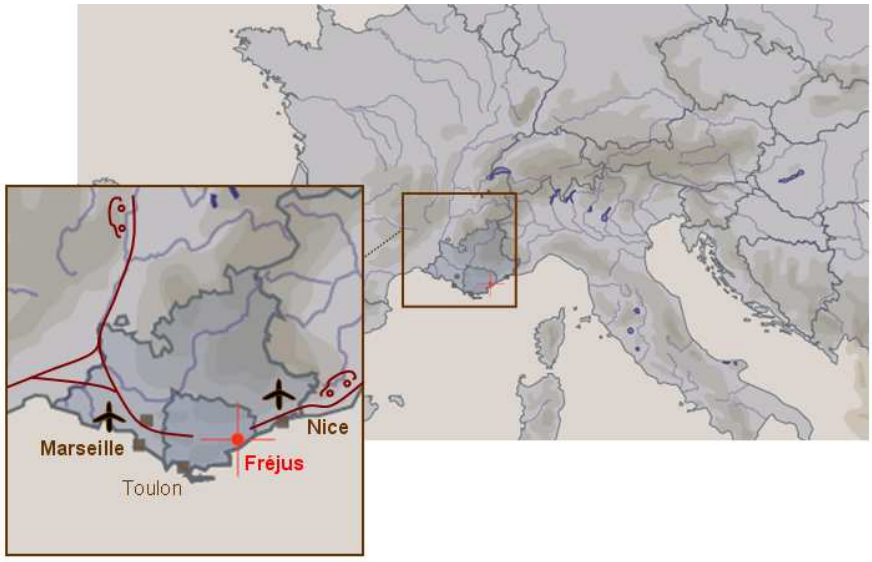
- Airport Toulon/Hyères (99 km)
  (Bruxelles, London, Paris, …)
  <http://www.toulon-hyeres.aeroport.fr/en/content/view/full/603>

→ by train :

- Saint-Raphaël / Valescure (T.G.V.) (3,9 km)
  <www.voyages-sncf.com>
  <http://www.idtgv.com/infos/billet-train/billet-tgv-saint-raphael/index.html >
  than by:
  Bus (Agglobus ligne 3) from Saint-Raphaël toVilla Clythia.

→ by car :

- Highway
  Paris / Lyon (A6) – Lyon / Aix (A7) – Aix / Fréjus (A8)
  from Aix exit - Puget-sur-Argens / Fréjus n° 37
  from Nice exit - Fréjus Centre / Saint-Raphaël n° 38



DEADLINES

Due to the fact that all invited speakers and participant are hosted on the event's site, the number of participants is limited

We invite scientists interested to contact us as soon as possible.

Contacts :
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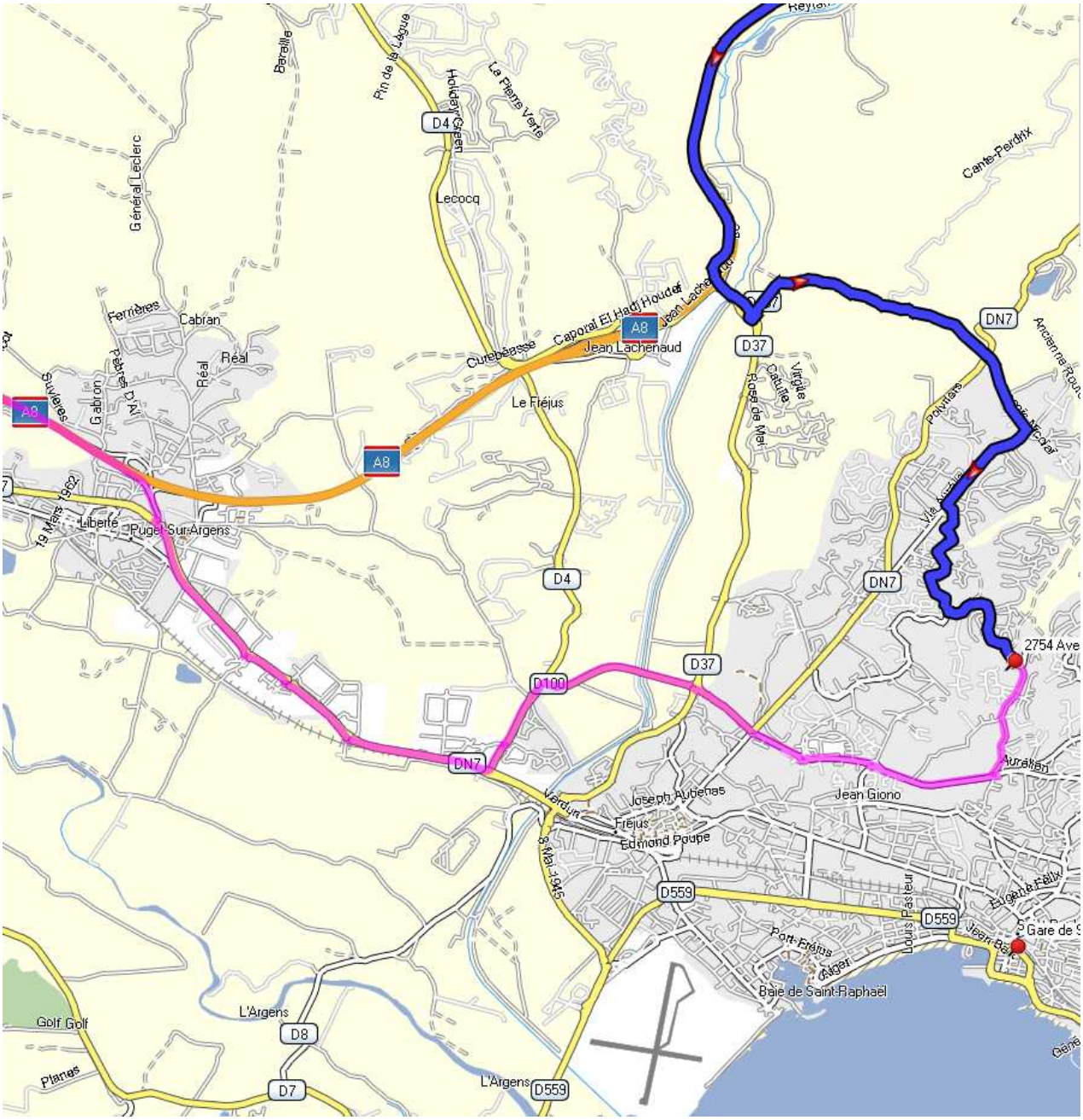
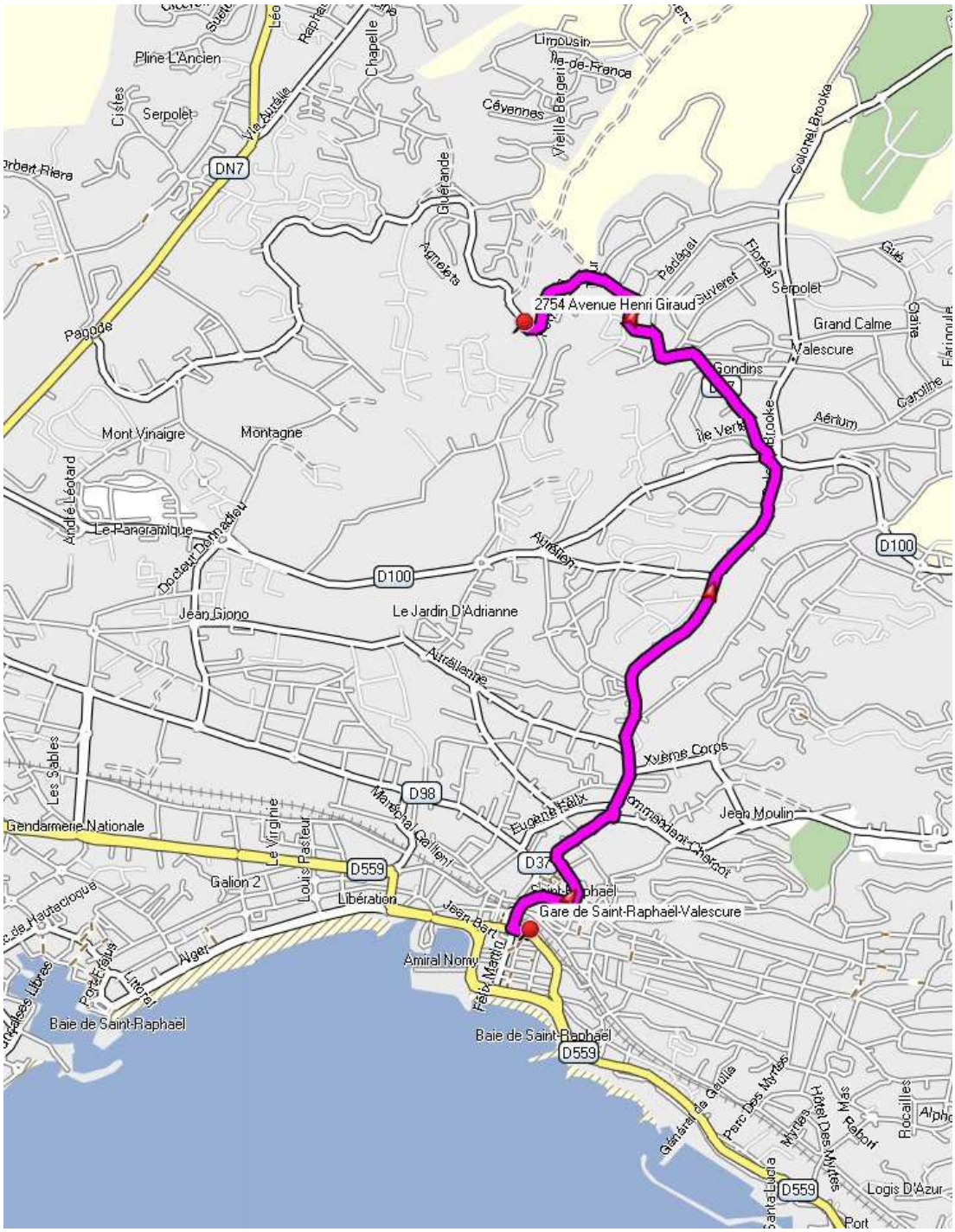
idu@map.archi.fr
jyb@map.archi.fr



How to get to Villa Clythia by car ?
magenta line – from West (from Aix-en-Provence)
blue line – from East (from Nice)



How to get to Villa Clythia from Railway Station Saint-Raphaël / Valescure (3,9 km) ?