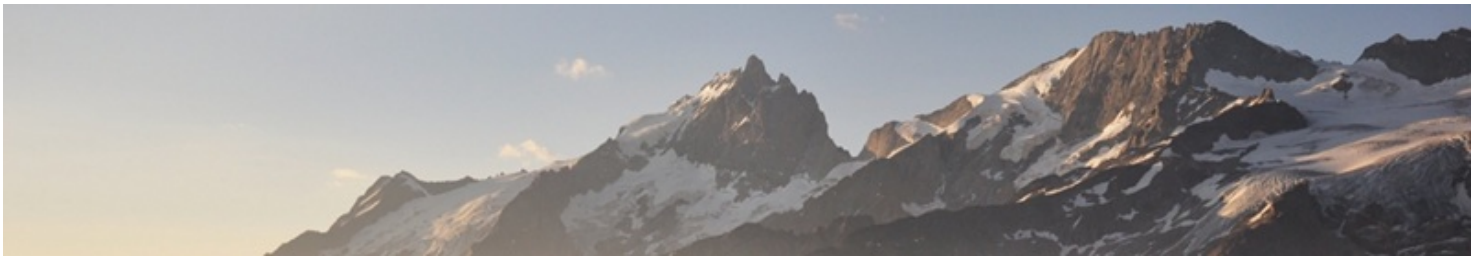


4^{th} Workshop of

LICIA

http://licia-lab.org

October 20-21, 2014

Laboratoire d'Informatique de Grenoble
Maison Jean Kuntzmann

Grenoble

Scientific Program

Program at a glance

	Monday, October 20th, 2014
8h45	Welcome coffee
9h30	**Opening** • Summary of LICIA activities • LICIA Perspectives and Roadmap
10h30	**Keynote A** Simulation of High Performance Computing Systems Arnaud Legrand (LIG and ExaSE team)
11h30	Fablab presentation
12h	Lunch-break
14h	**Keynote B** Opinion mining: beyond reviews and twitters Karin Becker (UFRGS)
15h00	**Graduate Students Highlights (1)** • Alencar Machado (UFRGS) • Julio dos Anjos (UFRGS, Lyon)
15h30	Coffee-break
16h00	**Graduate Students Highlights (2)** • Joaquim Assunção (PUCRS, LIG) • Francieli Zanon Boito (UFRGS, LIG)
16h30	**Emerging Trends** • Tell me why: Providing rich review explanations François Portet (LIG) and Cyril Labbé (LIG)
17h	**Working Groups (in parallel)**
19h30	Dinner in the Vercors

	Tuesday, October 21st, 2014
9h	**Working Groups (in parallel)**
10h30	Coffee-break
11h	**Keynote C** Document and language processing in LICIA: lexical resources, corpora and multilingual systems Carlos Ramisch (AMU) and Viviane Moreira (UFRGS)
12h	Lunch-break
13h30	**Emerging Trends** • Transformation of Graphs and Verification Rachid Echahed (LIG) and Leila Ribeiro (UFRGS) • Recents efforts of ϕ – Robotics Research Group Edson Prestes (UFRGS)
14h30	**Graduate Students Highlights (3)** • Fernando Machado Mendonça (UnB, LIG) • Alessandro Kraemer (LIG)
15h00	Coffee-break
15h30	**Brafitec and Students Highlights** • Marianne Genton (INP Grenoble) • Brafitec students present their experience
16h30	**Closure** • Working Groups Results • Workshop wrap-up
17h	**LICIA Scientific Committee Meeting**
19h30	Dinner (Location to be announced)

Graduate Students Highlights

Julio dos Anjos (UFRGS, Lyon) BIGhybrid – A Toolkit for Simulating MapReduce in Hybrid Infrastructures

Francieli Zanon Boito (UFRGS, LIG) Transversal I/O Scheduling - from Applications to Devices

Fernando Machado Mendonca (LIG) Scheduling with contiguity and locality

Joaquim Assunção (PUCRS, LIG) A Dimensionality Reduction Process to Automatic Generation of Stochastic Models

Alessandro Kraemer (UFPR,LIG) A study on Scheduler in High Performance Computational Systems

Alencar Machado (UFRGS) A Reactive and Proactive Approach for Ambient Intelligence

Working Groups

Working groups will be carried-out in parallel according to people's interests.

WG1	High Performance Computing	WG2	Language Processing
WG3	Computer Graphics and Human Computer Interaction	WG4	Information Systems
WG5	Robotics	WG6	Distributed Systems
WG7	FabLab Visit		

Keynotes

Simulation of High Performance Systems

Arnaud Legrand (CNRS)
Abstract: Modern computing systems have become increasingly complex and large scale. This irreducible complexity of creates a large gap between our understanding of the system and its reality, between the facts and our analysis. Simulation is thus an appealing alternative to study such systems. Indeed, in silico studies have proved their usefulness in most other scientific and engineering disciplines. This keynote will provide attendees with clear perspectives on the challenges for experimental research in the area of large-scale parallel computing, and on current technology for conducting experiments with real-world testbeds, emulated testbeds, or simulated testbeds. It will particularly emphasize on the capabilities and limitations of simulation.
Short bio: Arnaud Legrand is a tenured CNRS researcher at Grenoble University, France since 2004. His research interests encompass the study of large scale distributed systems such as grid, volunteer computing platforms and supercomputers. More specifically, his research focuses on 1) theoretical tools for such platforms (scheduling techniques, combinatorial optimization and game theory) and 2) performance evaluation of such systems, in particular through simulation. He obtained Ph.D. from the Ecole Nationale Superieure of Lyon, France in 2003. He is also one of the main developers of the SimGrid project, an open source framework to study the behavior of large-scale distributed systems such as Grids, Clouds, HPC or P2P systems.

Opinion mining: beyond reviews and twitters

Karin Becker (UFRGS)
Abstract: Governments, companies and organizations rely on public opinion to define strategies to improve the services they provide, or increase the success and visibility of the brands, entities or causes they represent. Opinion mining aims at automatically identifying opinionative content in documents available in the web, and determine the sentiment, perception or attitude of the public with regard to the target of the opinion. Product reviews and tweets are popular sources of opinions, well explored by existing works. Sentiment-based applications can only be reliable as we understand which groups of opinion holders are represented in each opinion source, how they express opinions, and how opinions should be processed and weighted. This talk focuses on identifying the key challenges in each type of user-generated opinion media, our experiences in handling the specifics of newspapers comments, and our current research interests in opinion mining.
Short bio: Karin Becker is an Associate Professor at the Computer Science Institute of UFRGS since 2010. She is currently a Visiting Scholar at the Information Science Institute of University of Sourthern California (USA). She received a Ph.D. degree in Computer Science from the Facultés Universitaires Notre-Dame de la Paix (Belgium), and a M.Sc. degree from UFRGS (Brazil). She holds a large background on research and development in both the academia and industry, mainly in the areas of data and web mining and software engineering. Her current interests are focused on the application of data mining techniques to web-related data (opinion mining, web services, social networks, linked data), as well as agile software development practices. She has near 100 published papers, including articles in journals and conference proceedings, and book chapters. She served as chairperson and member of program committee in several conferences, and she presented tutorials and keynote talks in data mining in Brazilian and Latin American events.

Document and language processing in LICIA: lexical resources, corpora and multilingual systems

Carlos Ramisch (AMU) and Viviane Moreira (UFRGS)
Abstract: In this talk, we will provide an overview of past and current research activities in natural language processing and information retrieval in the context of LICIA. We will start by briefly introducing the area of natural language and document processing, its hot topics and open research questions addressed by the French and Brazilian teams in LICIA. Then, we will present the teams themselves, involved in joint projects, and their expertises. Finally, our presentation will focus on two ongoing projects: CAMELEON and AIM-WEST. CAMELEON is a CAPES-COFECUB collaboration ending in 2014. In this project, we created resources and developed techniques for dealing with words and expressions in multilingual texts, lexicons and ontologies. AIM-WEST is a new project funded by CNRS, INRIA, FAPERGS and FAPESP whose goal is to study and improve the tratement of multiword expressions in speech and translation technology.
Short bio: **Carlos Ramisch** is a lecturer at Aix-Marseille University and Laboratoire d'Informatique Fondamentale de Marseille (France). He holds a double PhD in Computer Science from the University of Grenoble (France) and from the Federal University of Rio Grande do Sul (Brazil). His research interests include multiword expressions acquisition, representation and applications, lexical resources, machine translation, corpus-based statistical methods and machine learning. Carlos was co-organiser of several initiatives including the MWE workshop and a special issue of the ACM TSLP journal. He also develops and maintains the mwetoolkit framework for automatic MWE acquisition (http://mwetoolkit.sf.net).
Viviane Moreira is an Associate Professor at the Institute of Informatics-UFRGS in Brazil. She received her Ph.D. from Middlesex University, UK (2004) and her M.Sc. from INF-UFRGS (1999). More recently, she spent a sabbatical year at the University of Utah (USA). Her main area of interest is multilingual matching, i.e. how to match elements represented in one natural language to elements represented in another natural language. The growing availability of information in many languages has been increasingly motivating research in this field. Multilingual matching is a fundamental step in many tasks, such as Cross-Language Information Retrieval and Cross-Language Plagiarism Detection. She has also been participating in research that aims at crawling the web looking for domain-specific corpora. In addition, she recently started working on the topic of author profiling and multilingual sentiment analysis.

Emerging Trends

Transformation of Graphs and Verification

Rachid Echahed (LIG) and Leila Ribeiro (UFRGS)
Abstract: Graphs are structures that are universally used in mathematics and computer science. For example, they are models for communication networks and are used in model-driven engineering for representing complex systems. They are also widely present in natural sciences like chemistry or biology. Graph transformations describe structural changes that graphs undergo, for example during a network failure, a chemical reaction, during execution of a program manipulating pointers or during a refactoring step in model-driven engineering. Having a precise grasp of what is going on during a graph transformation is essential for predicting the effects of a graph transformation, for example, in order to carry out a network failure analysis, in computer-assisted chemical engineering, or when proving the correctness of a program or a refactoring step. For this, logic has turned out to be a versatile and precise description mechanism. The analysis of complex computational systems involves the verification of different kinds of properties, like structural properties of states, properties of computations etc. Correctness is thus achieved by using different analysis techniques and tools to verify each of the desired properties. To suitably express Graph transformations and their properties, a variety rewriting approaches and logics may be necessary. In this project, we investigate the analysis of complex systems specified using graph transformations. We tackle different analysis techniques with the aim of comparing their expressiveness and applicability in practice. In addition, the project aims at fostering a collaboration between two French and three Brazilian research teams that have been working on related and complementary analysis techniques for graph transformation, but without a formal collaboration.

Recents efforts of ϕ – Robotics Research Group at UFRGS

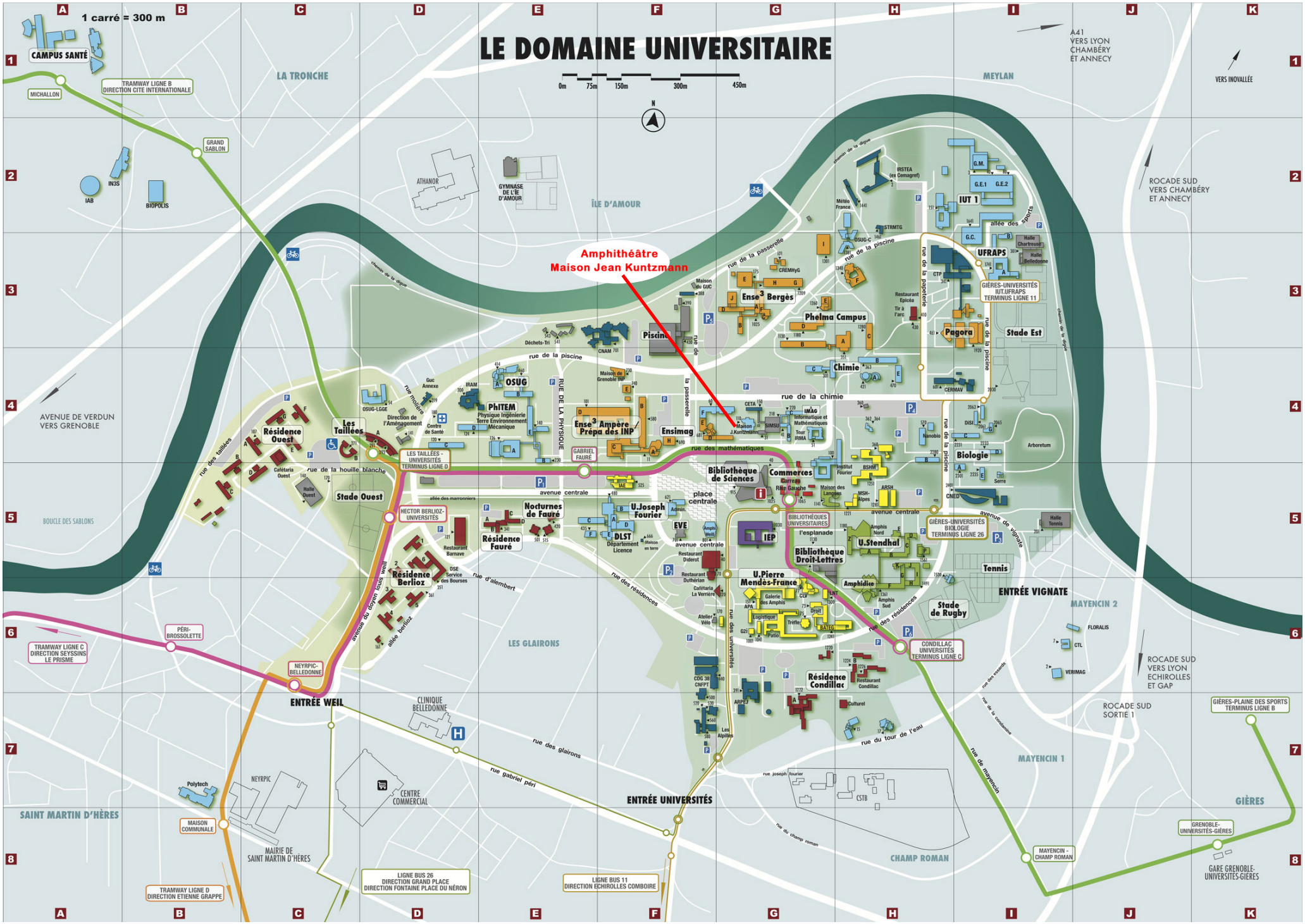
Edson Prestes (UFRGS)
Abstract: This talk aims to give an overview of the researches developed in the ϕ - Robotics Research Group (http://www.inf.ufrgs.br/phi-group/). This group is held in the Informatics Institute at UFRGS and aims to study problems related to the use of robotics in field and indoor (FI = phonetically ϕ) environments. During last years, this group has been conducting several researches on SLAM, Self-localization, Integrated Exploration and Ontologies. It has solid relationship with different laboratories and groups around the globe, that include, groups from USA, France, Canada, Egypt. This talk will present some recent projects that include projects related to Humanitarian Activities and to the Standardization Efforts in Robotics and Automation.

Tell me why: Providing rich review explanations

François Portet(LIG) and Cyril Labbé(LIG) Vinicius Woloszyn (UFRGS,LIG), Sihem Amer-Yahia (LIG), Dante Barone(UFRGS)
Abstract: People increasingly rely on collaborative reviewing sites (e.g., Yelp for restaurants, TripAdvisor for hotels or Amazon for books) to achieve mundane tasks such as purchasing a product or choosing a film. While, these sites are nowadays composed of rich datasets containing personal users' details and detailed description of items it is still difficult for a person to make sense of the high amount of available reviews (i.e., the opinion of one person about one item). Indeed, most of the richness of a review is contained in free-text comments whose information is still challenging to extract automatically. In this talk, we present the beginning of the The Tell Me Why project whose aim is to analyse and summarize reviews written by different people to help users to make their own opinion about a specific item. We propose a combination of text analysis from reviews with the exploration of an exponential search space that results from crossing reviewer and item dimensions. The adopted processing architecture can roughly be decomposed into three different steps.
1) non supervised « rules » extraction from users' rating aiming at discovering empirical law like « young American loves Judd Apatow comedies» ;
2) summarization, in natural language, of the most relevant laws to the user ;
3) insertion of the most relevant phrases of existing reviews the summary (i.e., inserting quotations).
A small human experiment performed in July confirmed the interest of the approach and shed light on the issues to be addressed in future works

Location

Amphitheater and room G010 Maison Jean Kuntzmann (MJK) 110, rue de la chimie Campus Universitaire, Saint-Martin d'Hères	Lunch Restaurant No Name 35 Rue Antoine Polotti Saint-Martin-d'Hères
Tramway stop **Bibliothèque Universitaire** lines B and C	 **Les Taillées** line B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A41
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ET ANNECY
VERS INOVALLÉE
ROCADE SUD
VERS CHAMBÉRY
ET ANNECY
AVENUE DE VERDUN
VERS GRENOBLE
BOUCLE DES SABLONS
LES GLAIRONS
CHAMP ROMAN
SAINT MARTIN D'HÈRES
GIÈRES
MAYENCIN 1
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VERS LYON
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Météo France
STRMTG
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G.E.1
G.E.2
IUT 1
allée des sports
G.C.
UFRAPS
Halle Chartreuse
Halle Belledonne
GIÈRES-UNIVERSITÉS
IUT.UFRAPS
TERMINUS LIGNE 11
Restaurant Epicéa
Tir à l'arc
Pagora
Stade Est
CREMHyG
Ense³ Bergès
Phelma Campus
Piscine
Maison du GUC
Déchets-Tri
CNAM
Chimie
CERMAV
rue de la piscine
rue de la passerelle
rue de la papeterie
rue de la chimie
chemin de la digue
Guc Annexe
OSUG-LGGE
OSUG
Direction de l'Aménagement
Centre de Santé
IRAM
PhITEM
Physique Ingénierie Terre Environnement Mécanique
RUE DE LA PHYSIQUE
Maison de Grenoble INP
Ense³ Ampère
Prépa des INP
Ensimag
GABRIEL FAURÉ
rue des mathématiques
IMAG
Informatique et Mathématiques Appliquées
Tour IRMA
SIMSU
CETA
J.Kuntzmann
Les Taillées
LES TAILLÉES - UNIVERSITÉS
TERMINUS LIGNE D
rue des taillées
Résidence Ouest
Cafétaria Ouest
rue de la houille blanche
Stade Ouest
Halle Ouest
HECTOR BERLIOZ-UNIVERSITÉS
avenue centrale
allée des marronniers
Nocturnes de Fauré
Résidence Fauré
Restaurant Barnave
U.Joseph Fourier
Admin.
DLST
Département Licence
Maison en terre
EVE
Ampli Weill
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Bibliothèque de Sciences
Commerces
Carré Rive Gauche
Institut Fourier
BSHM
ARSH
MSH-Alpes
Maison des Langues
CNED
Biologie
Arboretum
Serre
Nanoble
DISI
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Amphi Nord
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avenue de vignate
Halle Tennis
Tennis
Bibliothèque Droit-Lettres
Amphidice
U.Pierre Mendès-France
Galerie des Amphis
Cafétaria La Verrière
Restaurant Diderot
Restaurant Duthérian
Atelier Vélo
APA
Droit
Logistique
Tréfle
Patio
RATEG
Stade de Rugby
ENTRÉE VIGNATE
CONDILLAC UNIVERSITÉS
TERMINUS LIGNE C
Résidence Condillac
Restaurant Condillac
Culturel
CDG 38
CNFPT
ARPEJ
Les Alpilles
Résidence Berlioz
DSE Service des Bourses
Atelier Théâtre
avenue du doyen louis weil
allée berlioz
rue d'alembert
rue des résidences
rue des universités
rue du tour de l'eau
rue des glairons
rue gabriel péri
rue joseph fourier
rue du champ roman
rue de la cordeline
rue de mayencin
PÉRI-BROSSOLETTE
TRAMWAY LIGNE C
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LE PRISME
NEYRPIC-BELLEDONNE
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CLINIQUE BELLEDONNE
ENTRÉE UNIVERSITÉS
Polytech
NEYRPIC
CENTRE COMMERCIAL
MAISON COMMUNALE
MAIRIE DE SAINT MARTIN D'HÈRES
TRAMWAY LIGNE D
DIRECTION ETIENNE GRAPPE
LIGNE BUS 26
DIRECTION GRAND PLACE
DIRECTION FONTAINE PLACE DU NÉRON
LIGNE BUS 11
DIRECTION ECHIROLLES COMBOIRE
CSTB
FLORALIS
CTL
VERIMAG
GIÈRES-PLAINE DES SPORTS
TERMINUS LIGNE B
GRENOBLE-UNIVERSITÉS-GIÈRES
MAYENCIN - CHAMP ROMAN
GARE GRENOBLE-UNIVERSITÉS-GIÈRES