

Liophant Simulation

Report 2014

www.liophant.org







Liophant Simulation

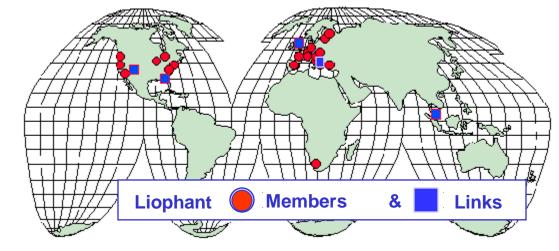
URL www.liophant.org Email info@liophant.org



Liophant was established as Chapter of the Society for Computer Simulation International and is an observer member in Eurosim; Liophant Simulation in 2012 as been reorganized and involves World-Wide Scientists and Technicians working in Companies and Academia.

Liophant Simulation promotes international Cooperations and exchanges with Excellence Centers World-Wide (i.e. NCS)

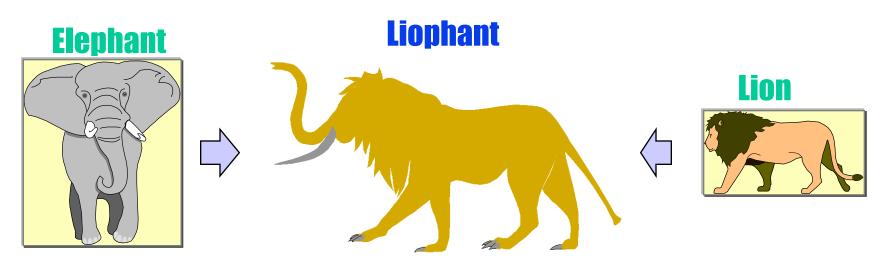
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What is a Liophant ?

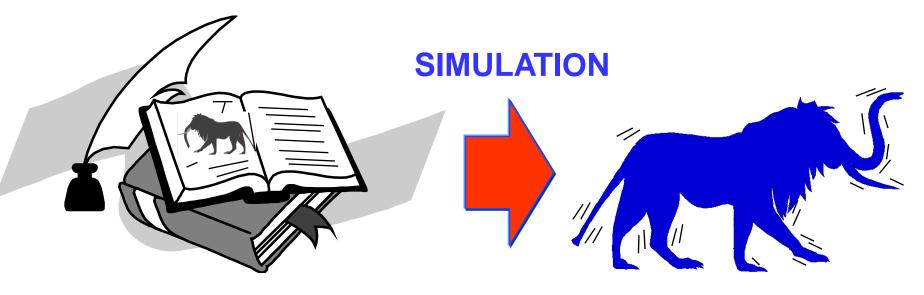
- It is a combination of an Elephant and a Lion
- It is a Mythological Being
- He is Brave as a Lion and Strong as a Elephant





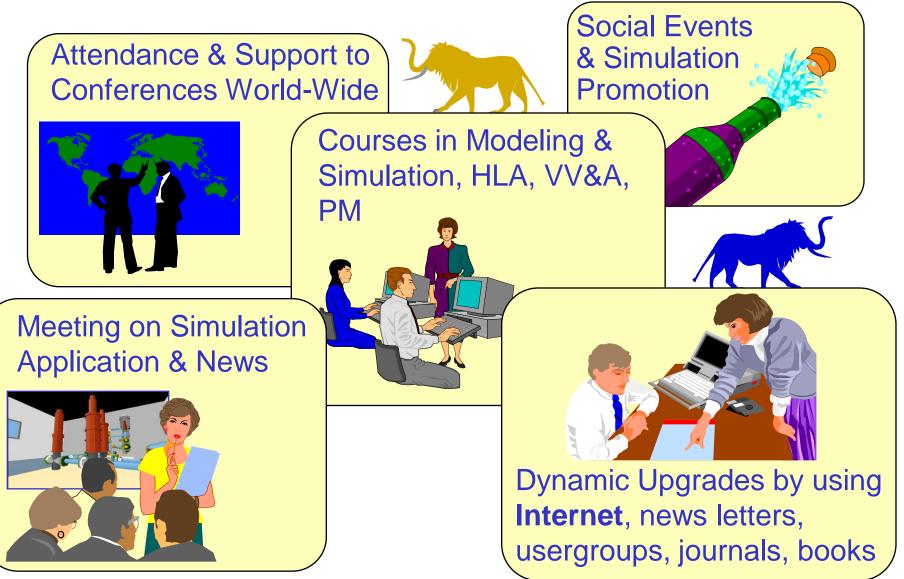
Why Liophant?

• The *Liophant* is a Mythological Being that only Simulation could bring back to life.





Liophant Simulation



Liophant Keywords:

International Cooperation Programs NASA & NCS ENSO McLeod Institute of Simulation S



McLeod Institute of Simulation Science IEPAL EU/USA Transatlantic Program

Act as a Point of Contact between Academia and Real World Support to University in Promotion Activity Organization of Meetings & Workshops

Motivation of the Students

International Contacts & Exchanges Independence of the Organization Real Industrial Challenging Projects Opportunities for Leadership and Team Working

Dynamical Relationship between Liophant and Young Members in Industry

HMS, MAS & WAMS Workshops

The International Conference on Harbor, Maritime & Multimodal Logistics M&S The International Conference on Modeling and Applied Simulation The International Workshop on Applied Modelling & Simulation

The HMS, MAS & WAMS Workshops are classical events after editions in Athens, Buenos Aires, Rio de Janeiro, Riga, Buzios, Genova, Portofino, Barcelona, Marseille, Bergeggi, Tenerife, Buzios, Sankt Petersburg









I3M: 10th Mediterranean Meeting International Multidisciplinary Modelling & Simulation Multiconference

The I3M Multi conference is a consolidate International event devoted to promote M&S in Multidisciplinary Framework







www.liophant.org/i3m

I3M: 11th Mediterranean Meeting International Multidisciplinary Modelling & Simulation Multiconference The I3M Multi conference IS а consolidate International event devoted to promote M&S in Multidisciplinary Framework AR **DHSS** 2014 M&SNet **I3M 2014 Bordeaux** M&S Network McLeod Workshor HMS France WORKSHOP **McLeod Institute of** Simulation Science Workshop izers and Sno 2014 D. * PERUGIA WISH International Workshop 2014 Innovative Simulation for Health Care EMSS S 2014 www.liophant.org/i3m €uromerci 2014



New Conferences where Liophant Members are Actively Involved

2014 Conferences









the 4th International Defense and Homeland Security Simulation Workshop

The 11th International Multidisciplinary Modelling & Simulation Multiconference

26th European Simulation Symposium and Exhibition - Simulation in Industry

(Co-Located Events: I3M2014/EMSS2014/HMS2014/MAS2014/IMAACA2014/IWHISH2013/SESDE2014) (Possibility to attend also to CAX Forum by special arrangements, please check with longo@simulationteam.com)

I3M2014, Bordeaux, France, September 10-12, 2014 - www.liophant.org/i3m

EMSS2014, Bordeaux, France, September 2013 - www.liophant.org/i3m/emss2014

(Co-Located Events: I3M2014/EMSS2014/HMS2014/IMAS2014/IMAACA2014/IWHISH2013/SESDE2014) (Possibility to attend also to CAX Forum by special arrangements, please check with longo@simulationteam.com)

(Co-Located Events: I3M2014/EMSS2014/HMS2014/IMAS2014/IMAACA2014/IWHISH2013/SESDE2014) . (Possibility to attend also to CAX Forum by special arrangements, please check with longo@simulationteam.com) HMS2014, Bordeaux, France, September 2014 - www.liophant.org/hms

The 16th International Conference on Harbour, Maritime & Multimodal Logistics Modelling and Simulation

(Co-Located Events: I3M2014/EMSS2014/HMS2014/MAS2014/IMAACA2014/IWHISH2013/SESDE2014) (Possibility to attend also to CAX Forum by special arrangements, please check with longo@simulationteam.com) MAS2014, Bordeaux, France, September 2014 - www.liophant.org/mas

(Co-Located Events: I3M2014/EMSS2014/HMS2014/IMAS2014/IMAACA2014/IW/HISH2013/SESDE2014) (Possibility to attend also to CAX Forum by special arrangements, please check with longo@simulationteam.com)

I WISH2014, Bordeaux, France, September 2014 - www.liophant.org/conferences/2014/iwish

DHSS2014, Bordeaux, France, September 2014 - www.liophant.org/conferences/2014/dhss

The 3rd International Workshop on Innovative Simulation for Health Care

The 13th International Conference in Modeling & Applied Simulation

(Co-Located Events: I3M2014/EMSS2014/HMS2014/MAS2014/IMAACA2014/IWHISH2013/SESDE2014) (Possibility to attend also to CAX Forum by special arrangements, please check with longo@simulationteam.com) SESDE2014, Bordeaux, France, September 2014 - www.liophant.org/conferences/2014/sesde





CAX Forum

The International Workshop on Simulation for Energy, Sustainable Development & Environment

(Co-Located Events: I3M2014/EMSS2014/HMS2014/IMAS2014/IMAACA2014/IWHISH2013/SESDE2014) (Possibility to attend also to CAX Forum by special arrangements, please check with longo@simulationteam.com)

WAMS2014, November 2014 - www.liophant.org/conferences/2014/wams

The International Workshop on Applied Modeling & Simulation

CAX Forum2014, 2014

The CAX Forum is organized by M&S Center of Excellence

(Possible Synergy with: The International Multidisciplinary Modelling & Simulation Multiconference





Sim & Sea - The Simulation and Sea, Genoa, Italy, June 9 - www.mimos.it

AfricaMS2014 - Modelling and Simulation, Gaborone, Botswana, September 1-3 - www.iasted.org

Simultech, Wien, Austria, September 2-4 2014 - www.simultech.org



IASTED

SIMULTECH

SummerSim2014, Monterey, CA - USA, July 2014 - www.scs.org

The Summer Computer Simulation Conference al Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS2013)



SpringSim2014, Tampa, FL - USA, April 13-16 2014 - www.scs.org

Simulation Exploration Experience 2014 (formerly Smackdown)



MIC2014 - Modelling, Identification and Control, Innsbruck, Austria, February 17-19, 2014 - www.iasted.org

Liophant Figures

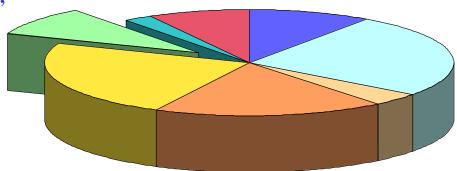
Services & Associations of the Members:

Italian Army, Guardia di Finanza, MISS, NCS, Fraunhofer IFF

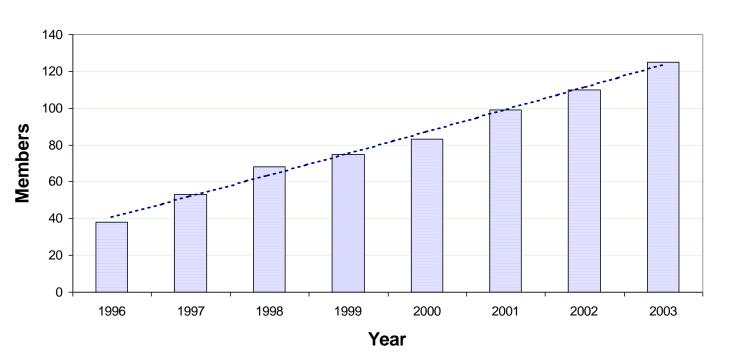


Student

Servicés



Liophant Members



Example of Member Affiliations: PMCorp Exxon NASA, COOP Guildemeister & SMEs

The International Activity of Liophant ICAMES96, Istanbul, May 1996

ICAMES96, Istanbul, May Best Project Award for Prosim(1st), V.,M.,B., Wolf, Moretti, Tremori,



ESM96, Budapest, June Environment Applications of Neural Networks Motta



Student Activity



ESS96, Genoa October, Simulation in Industry

Organization Full Staff

SCS

1st National Conf. On Maritime Safety, Genoa September, *Organization* Full Staff

Student Activity

ANIMP96, Venice, October Computer Graphics for Production Best Project Award M.Mosca, S.Genta

AILOG96, Milan, May Warehouse Simulation Best Project Award (1st) Bertolini & Tremori



ICAMES97, Istanbul, May Award for Prisoner's Dilemma Algorithm (1st) Award for VAED (3rd), Gabriele Cotta & Roberto Revetria



ESM97, Istanbul, June Environment Applications of Neural Networks



Riga 97,October Web Based Simulation of Harbour Services Alessio Carbone



Phoenix 97,July Health Care System Survey Wolf Student Activity

1997

ANIMP97, Sorrento, October Virtual Aided Engineering & Design Best Project Award Gabriele Cotta & Cerruto

EUROMEDIA, London Web Based Applications Lorenzo Motta

> Magdeburg 97, October WOLVES Warehouse Org. & Logistics Simulation Bertolini Carbone Revetria

> > ESS97, Passau, October Pollution Control Lorenzo Motta



ITEC97, Lausanne, June Safety First: Virtual Harbour Gabriele Cotta & Mauro Cerruto

Orlando 97,September NCS Cooperations, Remote Education Project Alberto Tremori

ICAMES98, Istanbul, May **POSEIDON** A.Carbone, M.Lagostena, G.Tani Summer Simulation Reno 98, July TOM Filippo Paradiso

WMC98, San Diego 98 **Artificial Neural Network** Lorenzo Motta

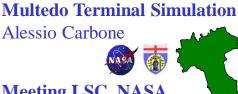
Riga 98, Workshop on Modeling within a Maritime Environment Web Based Harbour Simulation A.Carbone, A. Devoti, A.Tremori

NEURAP98, Marseille, March **Intelligent Acquisition System Best Paper Award** R.Revetria, L.Motta

Student Activity

ITEC98, Lausanne, June Alessio Carbone, Roberto Revetria

ESM98, Machester Web Based Applications Lorenzo Motta



Student Activity

Genoa, April

Ports98, Genoa, September

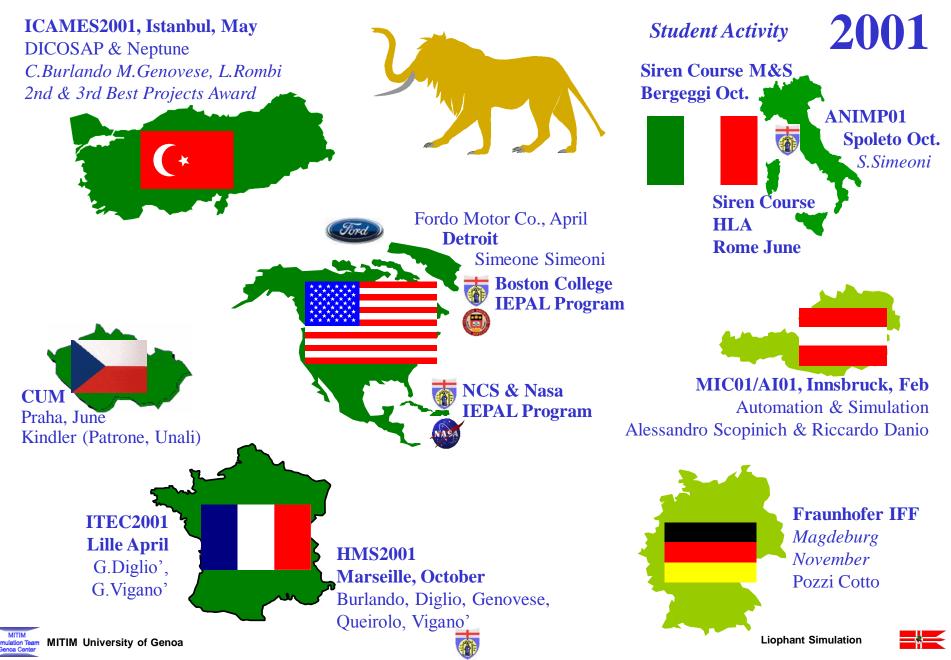
ANIMP98, Bologna, October **Automotive Assemblying Simulation** Filippo Paradiso

Meeting LSC, NASA

1998











ICAMES2003, Istanbul, May DIROMATIC, NERONE F.Figini, M.Sanguinetti, G.Boero, C.Caballini, V.Barcucci. S.De Michelis **3rd Best Projects Award**

SportFest 2003, June Liophant Football Team 3rd Position SCS

> SCS, ICT & Univ Southern California November Danila Carini

Universidad Panamericana Danila Carini December Mexico City

UFRI **UFRJ Rio De Janeiro** October-November F.Figini **SCSC2003 Student Workshop Montreal July** Over 10 students from USA. Canada

> **Boston College &** (💾) **Stevens Institute** March-April STEVENS V.Bortoletto, G.Boero, M.Sanguinetti, C.Caballini Over 10 students from Germany, France & Italy

Orlando March-April **NCS & UCF - IEPAL** V.Bortoletto, G.Boero, M.Sanguinetti, C.Caballini Over 10 students from Germany, France & Italy

IEPAL/IEEE Genoa/Novara **B** 21 E.Mantero, D.Carini Over 26 students from USA, Germany, France, Turkey & Italy

Student Activity

PhD, Master, BS

Bergeggi, Oct.

Workshop MAS2003

Workshop VMASC, **Liophant MISS** Genoa, September F.Figini, D.Carini

2003





P.Blomjous,

TUDelft

S.van Houten



MITIM University of Genoa

























Crisis Responce Disaster COE, Sofia, M.Biagini

> **Risk Analysis and** Simulation Abu Dhabi, February P.Bortolotto

Counter **Terror Expo** London July G.Franzinetti

Summersim, Monterey July, C.Bartol`ucci 465

ITEC

M.Biagini

I/ITSEC Orlando, November Cologne, May L.Nicoletti, F.Spadafora



MILLIM - DIME UNIVERSITY of Genoa

Exchange Activity PhD, Master, BS

Simulation Team Lab P.Motroni, A.Vueling

MCWS&MSTPA Sim&Sea NATO STO CMRE September L.Dato, M.Agresta, I.Piccini, E.Picco, 🔊 D.Pereira

IMS Bordeaux University December Pereira Corso Agresta Bartolucci Nicoletti Picco

Sprinsim & NASA SEE Tampa, April A.Ferrando, L.Dato, *F.Spadafora*

Simtech, **Brisbane** June. M.Biagini

WAMS & **CAX Forum** Istanbul, Sept **Bartolucci**

June, M.Corso, C.Bartolucci, NMSG VV&A, Rome

October, M.Corso, G.Murino **NATO Simulation Course** November, E.Picco

> SIMCJOH, Rome, May G.Pogio, E.Picco

2014

ICAMES Istanbul, May M.Agresta, A.Bartolucci, A.Ferrando, S.Vena

Liophant Simulation

Liophant and Eurosim

EUROSIM

FEDERATION OF EUROPEAN SIMULATION SOCIETIES

IROSIN EUROSIM Member Societies UROSIM News EUROSIM member societies may be regional and/or national simulation societies. At present EUROSIM has 13 full lember Societies members and 1 observer member. Full member societies: CROSSIM ASIM – Arbeitsgemeinschaft Simulation (Austria, Germany, Switzerland) FRANCOSIM **CROSSIM** – Croatian Society for Simulation Modelling CSSS - Czech and Slovak Simulation Society DBSS – Dutch Benelux Simulation Society (Belgium, The Netherlands) FRANCOSIM – Société Francophone de Simulation (Belgium, France) HSS - Hungarian Simulation Society SLOSIM ISCS – Italian Society for Computer Simulation PSCS – Polish Society for Computer Simulation CEA SMSG SIMS – Simulation Society of Scandinavia (Denmark, Finland, Norway, Sweden) **SLOSIM** – Slovenian Society for Simulation and Modelling UKSIM – United Kingdom Simulation Society (UK, Ireland) CEA SMSG Spanish Modelling and Simulation Group LIOPHANT LSS- Latvian Society for Simulation ublications UROSIM Observer member societies: UROSIM Conferences / UROSIM Calenda

SIMS PSCS RANCOS CEA SMS

- ROMSIM Romanian Society for Modelling and Simulation NSS - National Simulation Society (Russia)
- LIOPHANT SIMULATION international modelling and simulation group (Italy)

UROSIM Links

DMIN

Liophant Simulation listed as Observer Member Society in Eurosim applying to become Full Member







The Liophant is a Mythological Being that only Simulation can bring back to Life !

Liophant is a non-profit association born in order to be a trait-d'union among simulation developers and users; Liophant is devoted to promote and diffuse the simulation techniques and methodologies; the Association promotes exchange of students, sabbatical years, organization of International Conferences, organization of courses and stages in companies to apply the simulation to real problems.

6

SCS

- Activities
- <u>Conferences</u>
- <u>Members</u>
- <u>Registration</u>
- Miscellanies NEW
- Report NEW
- Library №₩
- Liophant Code of Ethics №₩

Liophant was established as Chapter of

the Society for Computer Simulation International and is an observer member in Eurosim

Simulation Exploratory Experience Modeling and Simulation Outreach (formerly Smackdown)



Lunar base supply mission

 Location Rima Hadley (Near Apollo 15 Site) · Mission Objective

Resupply the lunar base with earth cargo Retrieve He-3 from Mobile ISRU Plant (MIP)

Vehicles

Earth - Moon Transfer Vehicle

- Lunar Shuttle
- Lunar Rover
- Lunar Surface Supply Depot Mobile ISRU Plant
- Exploratory Hopper
- Communications Satellite





👯 Applicazioni 🔘 classi

Tcames..:::::.....

🔘 classico 🛛 🦮 crystal 📄 mcgi 🛛 🐺 Codice disciplinare e n...





ICAMES 2013 FROM OUR RECTOR FROM OUR DEAN FROM OUR PRESIDENT ORGANIZATION COMMITTEE HISTORY PHOTO GALLERY COMMENTS CONTACT





ICAMES is the "International Cultural and Academic Meeting of Engineering Students", organized by the Engineering Society of Bogazici University. It is a project competition held in second week of May annually aiming to gather the different cultures from different countries in Istanbul. The most crucial importance of ICAMES is that it is the first and only organization which brings the university students and academicians together on an international base in Turkey. The support of Bogazici University Rectory and Dean of Engineering School is the guarantee that **ICAMES** will continue at full pace in the successive years being an engineering student and having a sense of engineering is sufficient. Although the main concept of **ICAMES** is a major project competition it is complemented with informative presentations about the cultures of Turkey and participating countries. **ICAMES**, which will be held for the 19th time this year, had been organized in 1994 for the first time by a group of students keeping in mind their principle as "Great deeds come with great dreams".

Our aim is not only to organize an academic workshop but also to introduce our country and culture and to improve mutual understanding between students from different cultures, religion and ethical backgrounds throughout **ICAMES**. At the same time we provide the participating countries with the opportunity to present their own cultures. Furthermore, the competition is complemented with







Liophant Simulation Libraries



ß	TITLE	Editor	Keywords				
1	Systems Magazine Future Generation Computer	IEEE Aerospace & Electronic	Data Processing				
2 J	Systems	North-Holland	IT Industrial				
3	Automazione	Jackson	Engineering Industrial				
4	Rivista di Meccanica Oggi	Jackson	Engineering				
5	Simulation News Europe	Eurosim	Simulation				
9	Jane's Defence Weekly	Jane's	Miltiary Industrial				
7 J	Impiantistica Italiana	ANIMP Society for Computer	Engineering				
ß	Simulation Singapore Maritime & Port Journal	Simulation	Simulation				
9	2001	MPA Singapore	Logistics				

Liophant has a wide selection of International Journals, Conference Proceedings and Scientific Books to be consulted by Liophant Members. Texts are spread in the libraries.

Here are some examples of Books and Journals in the Liophant Libraries





	are spread in the libraries.							
ID	Title	Authors	Editor	Year	Keywords			
B1	Making Hard Decisions Vol.1/2	R.J. Clemen	Duxbury	1985	DSS			
B2	Making Hard Decisions Vol.2/2	R.J. Clemen	Duxbury	1985	DSS			
B3	Neural Networks in Finance & Investing Vol. 1/2	R.R. Trippi, E. Turban	Probus Publishing Company	1992	AI			
B4	Neural Networks in Finance & Investing Vol. 2/2	R.R. Trippi, E. Turban	Probus Publishing Company	1992	AI			
B5	Nonlinear Dynamical Systems (Edition II)	P.A. Cook	M.J. Grimble - Prentice Hall	1994	Data Processing			
B6	Manuale di Manutenzione degli Impianti Industriali e Servizi	L.Furlanetto	FrancoAngeli	1998	Industrial Engineering			
B7	Applichiamo il Total Productive Maintenance	Vari - JIPM - JMAC	FrancoAngeli	1991	Management			
B8	Implementing Six Sigma	F.Breyfogle	Wiley-Interscience	1999	Management			
B9	Measuring Six Sigma & Beyond	R.Lawson, B. Stuart	Motorola University Press	1997	Management			
B10	The Baldridge Award for Education	J.S.Arcaro	St. Lucie Press	1995	Management			
B11	Applied Chaos Theory	A.B. Cambel	Academic Press	1993	Data Processing			
B12	The Fractal Geometry of Nature	B.B. Mandelbrot	Freeman	1983	Modelling			
B13	Making Hard Decisions New Edition	R.J. Clemen, T.Reilly	Duxbury	2001	DSS			
B14	Fractals & Scaling in Finance	B.B. Mandelbrot	Springer	1997	Modelling			
B15	Small Worlds	D.J.Watts	Princeton University Press	1999	Modelling			
B16	Simulation and Information System Design	E. Blumel, L. Novitsky	Jumi	2000	Simulation			
B17	Outsurcing	S.M. Bragg	Wiley-Interscience	1998	Management			
B18	Operations Scheduling	M.Pinedo, X. Chao	Irwin / McGraw -Hill	1999	Management			
B19	Simulation Modelling Using @Risk	W.L.Winston	Duxbury - Thomson Learning	2001	Simulation			
B20	A First Course in Fuzzy Logic	H.T.Nguyen, E.A.Walker	Chapman & Hall	2000	AI			
B21	Project Management	H.Kerzner	Van Nostrand Reinhold	1998	Management			
B22	Borland C++ Builder Guide	K. Reisdorph	SAMS Publishing/Apogeo	1998	ІТ			
B23	Tracking & Kalman Filtering Made Easy	E. Brookner	Wiley-Interscience	1998	Data Processing			
B24	Handbook of Simulation	J.Banks	Wiley-Interscience	1998	Simulation			
B25	Electronic Warfare in the Information Age	D. C. Schleher	Artech House	1999	Military			
B26	Understanding Synthetic Aperture Radar Images	C.Oliver, S. Quegan	Artech House	1998	Data Processing			
B27	Travi IPE-HE Sollecitate a Compressione ed a Flessione	ILVA Quaderno Tecnico	ILVA - Gruppo IRI		Industrial Engineering			
B28	SCAAT: Incremental Tracking with Incomplete Information	G.F.Welch	Chapel Hill	1996	Data Processing			
B29	Deterministic and Stochastic Optimal Control	W.H.Fleming, R.W. Rishel	Springer-Verlag		Data Processing			
B30	A Generic Traffic Simulation System with Distributed Load Sharing	J M Creagh	University College Cork	2000	Simulation			
B31	Almanacco Navale	Vari	Istituto Idrografico della Marina	1988	Military			
B32	Il Controllo Statistico per il Responsabile di Qualita'		FrancoAngeli	1995	Management			
B33	Basi di Dati e Basi di Conoscenza		Jackson	1995	Data Processing			

Liophant Simulation Football Team

Since May 2003, Liophant Simulation established the Liophant Simulation Football Team by students from different Italian Universities.

Liophant Football Team lays the Foundation Stone on Savona Campus Football History First Trophy Winner: 5-1 while Liophant Female Footbal Team was founded in 2007 and they won Savona Female Campus Trophy

In 2005, the first edition of Savona Campus Trophy was set up and Liophant have won this football's ultimate prize, cementing their status as the most successful team in the history of the Campus. Liophant Football Captain accepted the trophy in an emotional prize-giving Ceremony with his team and Club President in a Champagne waterfall (Veuve Cliquot for gossip columinst). In 2006 Liophant won again, while in 2007 he classified 2nd; on May 2008 LSFC won once again.



The Liophant Football Team established a Female Equipe in 2007; The Equipe was divided in two teams that resulted in First and Second place during the first Female Football Cup in Savona Campus during the 2007 autumn. The Equipe get a new "livrea" similar to Liophant Football team white shirt. A special game was run between Male and Female teams for establishing this new initiative during late 2007.





Sport Festival, Bogazici University 2003 LSFT 2nd at Football Luca Bucchianica elected King of Sport Festival Party

Liophanters

Liophant Simulation Members

- <u>G. Berrino</u>
- <u>E. Bocca</u>
- <u>A. Bruzzone</u>
- <u>L. Capelli</u>
- <u>G. Capra</u>
- <u>Cesiva (formerly Scuola di Guerra)</u>
- <u>L. Comuzio</u>
- <u>S. Costa</u>
- <u>G.G. Cunha</u>
- <u>A. Devoti.</u>
 D. Effrord
- P.Elfrey
- L. Fioravanti
- <u>C. Frydman</u>
- <u>G. Garassino</u>
- <u>A. Garro</u>
- <u>G. Gestro</u>
 N. Giambiasi
- R.Huntsinger
- F. Longo
- F. Madeo
- <u>M. Massei</u>
- Y. Merkuryev
- <u>G. Merkuryeva</u>
- MAST srl
- MIMOS
- I.Molnar
- National Center for Simulation
- <u>L. Pelizzoni</u>
- A. Pessina
- M.A.Piera
- A.M.Piccardo
- S.Pocobelli
- <u>G.Stulz</u>
- <u>A. Tremori</u>
- <u>J.Uebersax</u>
- E. Williams

Since 2012, Liophant Simulation has been reorganized as "Registered Non-Profit Organization" from "Non-Profit

Organization"









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President: Director: Secretary: Treasurer: A.G. Bruzzone E.Bocca A.Devoti M.Massei

Web Manager: Board of Accounters: F.Longo G.Gestro F.Madeo