GeoGebra Institute Application to establish the

GeoGebra Institute of Castilla y León (IGCL)

July 30 - 2014, Burgos, Castilla y León, SPAIN

The International GeoGebra Institute (IGI, <u>http://www.geogebra.org/igi</u>) is a non-profit organization that works together with independent regionally-based local *GeoGebra Institutes*. These local organizations need to apply to the International GeoGebra Institute in order to become an officially accredited GeoGebra Institute. Please submit this application form directly to IGI (<u>igi@geogebra.org</u>).

1 Acceptance of IGI Vision, Goals and Procedures

The applying GeoGebra Institute declares with this application that it accepts and shares the vision, goals, non-commercial nature, licensing and following procedures with the International GeoGebra Institute and its other GeoGebra Institutes.

1.1 Vision of the International GeoGebra Institute

The International GeoGebra Institute (IGI) provides free dynamic mathematics software and shares expertise in training, support and the development of materials for all students and teachers to improve mathematics, science and technology education world-wide. It nurtures and promotes collaboration between practitioners and researchers, seeking to establish self-sustaining user communities.

1.2 Mission of IGI and GeoGebra Institutes

The International GeoGebra Institute and its local GeoGebra Institutes share the following three goals:

- 1. **Training and Support**: To coordinate and provide professional development opportunities and support for both pre-service and in-service teachers.
- 2. **Development and Sharing**: To develop and share workshop resources and classroom materials, and to continually improve and extend the dynamic mathematics software GeoGebra.
- 3. **Research and Collaboration**: To conduct and support GeoGebra-related research which focuses on the teaching and learning of mathematics in order to inform and improve training and development activities, and to promote collaboration between IGI and local GeoGebra Institutes and between international colleagues.

1.3 Non-Commercial Nature

The applying GeoGebra Institute declares that it is (part of) a non-profit organization (e.g., university, teacher education college) with mainly non-commercial interests. Any use of GeoGebra for a commercial purpose (e.g., books, online materials, workshops) is subject to the license terms set out at <u>http://www.geogebra.org/license</u>. If you intend to use GeoGebra for a commercial purpose, including contractual engagements with Government funding bodies, please contact office@geogebra.org to arrange a Collaboration Agreement.

1.4 Research and Research Grants

IGI encourages GeoGebra Institutes to undertake research related to understanding the effects and effectiveness of GeoGebra in support of teaching and learning. IGI is also happy to support GeoGebra Institutes interested in applying for funding to support the production of curriculum materials, including textbooks (print and e-books) and on-line learning platforms.

GeoGebra Institutes must inform IGI regarding all proposed research and research grant activities in advance. Where possible, IGI should be included as a partner in all research and research grant activities.

1.5 Licensing

The applying GeoGebra Institute declares that it will share all developed materials under a Creative Commons Attribution, Share Alike license (see http://creativecommons.org/licenses/by-sa/3.0/) or a similar license and that it will respect the license of the GeoGebra software itself (see http://www.geogebra.org/license). The spirit of IGI and its GeoGebra Institutes is to share materials and be open for collaboration with everyone.

1.6 Requirements

1.6.1 Activities

The applying GeoGebra Institute declares that it will actively contribute to the GeoGebra community by

- developing and sharing materials via GeoGebraTube on an account of the same name as the GeoGebra Institute (<u>http://www.geogebratube.org/</u>),
- answering user questions via the GeoGebra Forum (http://www.geogebra.org/forum/),
- helping with translations of the GeoGebra software and documentation (http://wiki.geogebra.org/en/Translation_of_GeoGebra), and/or
- organizing and promoting GeoGebra events like workshops and conferences (http://www.geogebra.org/events)
- GeoGebra Institutes are required to host all GeoGebra applets and relevant content on their GeoGebraTube account. IGI encourages GeoGebra Institutes to create and assemble teaching and learning materials that are country/regionally relevant.

1.6.2 Website

The applying GeoGebra Institute states that it will regularly (at least once a month) describe its activities (workshops, materials, translation updates, etc.) on its GeoGebra Institute Website provided by IGI, see

http://wiki.geogebra.org/en/Establish_a_Regional_GeoGebra_Institutes_Website.

GeoGebra Institutes are not permitted to create independent urls, websites, wikis, blogs, or email accounts referencing GeoGebra without the explicit permission of IGI.

1.6.3 Chief Communicator

Each GeoGebra Institute appoints a Chief Communicator. This can be the Chair of the GeoGebra Institute or another person. He or she is responsible for

- publishing information about the GeoGebra Institute's activities on its website.
- staying in touch with the IGI team via email and/or web-conferences to exchange information and materials (e.g. events, publications, photos, videos, etc.)

1.7 Period of GeoGebra Institute Accreditation

After your GeoGebra Institute application is accepted, the official accreditation of your GeoGebra Institute is valid for an unlimited period. The Chair of your local GeoGebra Institute can end this agreement any time by sending an email to igi@geogebra.org, just as well as IGI has the right to withdraw the accreditation of a GeoGebra Institute if it is in violation of any of the aforementioned common IGI goals or requirements.

2 Structure and Activities of applying GeoGebra Institute

2.1 Structure of the GeoGebra Institute

Castilla y León is an Autonomous Region, located in central Spain, with full legal competencies in educational matters. The *Asociación Castellana y Leonesa de Educación Matemática "Miguel de Guzmán"* (Spanish acronym: *SOCYLEM*) is a mathematics teachers' association founded in Burgos, one of the capitals of Castilla y León, in 1992. There are currently around 450 members of the SOCYLEM, all of them mathematics teachers and professors in Castilla y León, working in Primary, Secondary or University levels. The SOCYLEM association is part of the so called "Federación Española de Sociedades de Profesores de Matemáticas" (Spanish acronym: FESPM. <u>www.fespm.es</u>).

Since its inception, the primary goal of SOCYLEM has been the development, dissemination and impulse of educational activities related to the world of Mathematics Education. This main objective is to be achieved through a collection of some more specific goals, as described in SOCYLEM by-laws (cf. <u>www.socylem.es</u>)

It is important to remark that SOCYLEM has established –since June 2012– a cooperation agreement with the Consejería de Educación (the regional equivalent to the Ministry of Education) of the regional government, the Junta de Castilla y León (www.jcyl.es), for the joint development and improvement of mathematics education activities. Because of this agreement, the regional government is committed to:

- Disseminate, all along our region, calls for activities organized under this Convention.
- Providing material (e.g. facilities for meetings and training sessions) and institutional (including the presence of representative members of the Junta de Castilla y León at the opening and /or closing sessions of the joint activities) support.
- Recognize, by means of a proper certification and with professional career effects, the participation of teachers to the organized training activities as well as the development of educative materials in this context.

In summary, SOCYLEM association can exhibit that it counts on the institutional support, at the level of our region, to develop its activities.

The head office of SOCYLEM "MIGUEL DE GUZMÁN" is located in Burgos:

Asociación Castellana y Leonesa de Educación Matemática "Miguel de Guzmán" IES Comuneros de Castilla. C/: Batalla de Villalar s/n 09006 Burgos (SPAIN) presidente@socylem.es

The *GeoGebra Institute of Castilla y León* (Spanish acronym: IGCL) will be managed by SOCYLEM association via a committee formed for that purpose (see below).

The IGCL website will be located at the URL provided by the IGI as described in

http://wiki.geogebra.org/en/Establish_a_Regional_GeoGebra_Institutes_Website.

2.2 Members of the GeoGebra Institute of Castilla y León (IGCL)¹

STAFF OF THE GEOGEBRA INSTITUTE OF CASTILLA Y LEÓN

Proposed chairperson for the GeoGebra Institute of Castilla y León (IGCL)

 José Manuel Arranz-San José. josemarranz@gmail.com Graduated in Physics for the University of Salamanca (1988). Mathematics Teacher at the Secondary Education Centre I.E.S. Europa (Ponferrada, Castilla y León), and associate professor in the University of León. Participant in the European project Intergeo integrated into the team at the University of Cantabria directed by Tomás Recio. Co-author of the web www.geometriadinamica.es from G4D group.

Representative of hosting institution (SOCYLEM) of IGCL

 Antonio Bermejo-Fuentes. <u>abfmatesleon@gmail.com</u> President of SOCYLEM "Miguel Guzman" since 2009. Graduated in Mathematics from the University Complutense of Madrid and Mathematics Mathematics Teacher at the Secondary Education Centre I.E.S. Antonio García Bellido (Armunia-León, Castilla y León)

Proposed Chief communicator for the GeoGebra Institute of Castilla y León

 Enrique Hernando-Arnáiz. <u>qsaurio@yahoo.es</u> Graduated in Physics from the University of Valladolid (1995) and Diploma of Advanced Studies and Research Aptitude in Teaching Mathematics and Experimental Sciences from the University of Salamanca. Mathematics Teacher at the Secondary Education Centre La Merced - Jesuitas (Burgos,

Mathematics Teacher at the Secondary Education Centre La Merced - Jesuitas (Burgos, Castilla y León).

¹ Curriculum detailed in Annex

Coordinator for Castilla y León of the ESTALMAT project: Draft Early Detection and Stimulus Talent in Mathematics (<u>www.estalmat.org</u>) since 2008.

Teacher training coordinator

 Rosa María Ruiz-Núñez. <u>rmruiz@educa.jcyl.es</u> Graduated in Mathematics from the University of Zaragoza (1992). Teacher of Secondary Education and Associate Professor of the University of Valladolid. Lifelong Learning Adviser in sciences and technology at the Center of Higher Teacher

Training of the Consejería de Education of the Junta de Castilla y León.

Trainer and webmaster

Rubén Jiménez-Jiménez. rujimenez05@gmail.com
Graduated in Mathematics from the University of Salamanca (1997) and graduated in Statistics (1999).
Mathematics Teacher at the Secondary Education Centre I.E.S. José Luis Aranguren (Ávila, Castilla y León).
Certificated as expert in GeoGebra software from the GeoGebra Institute of Cantabria.

<u>Trainer</u>

 Carmen Fernández-Cedrón. <u>cferna49@gmail.com</u> Graduated in Biology from the University of Oviedo (1979) and Sciences of Education (2004). Mathematics Teacher at the Secondary Education Centre I.E.S. Juan Martín "El Empecinado" (Aranda de Duero, Castilla y León). She completed a Master of e-Learning and ICT at the UOC (2013).

ADVISORY COMMITTEE OF THE GEOGEBRA INSTITUTE OF CASTILLA Y LEÓN

Members of Consejería de Educación of the JUNTA DE CASTILLA Y LEÓN:

- Leandro González Martín. gonmarle@jcyl.es Graduated in Therapeutic Pedagogy Head of the Service of Education program supervision, quality and evaluation General service of innovation in education and teacher training, Consejería de Education of the Junta de Castilla y León.
- José María Santa Olalla Tovar. jmsanta@educa.jcyl.es Graduated in Mathematics.
 Mathematics Teaching technical advisor of General Service of Innovation in Education and Teacher Training, Consejería de Education of the Junta de Castilla y León.

2.3 Activities and Goals of GeoGebra Institute

The activities of the IGCL would include the following:

- Collaborate with the different GeoGebra Institutes in Spain in the proposed activities.
- Increase awareness of the scope provided by GeoGebra, with a view to encouraging its use in the classroom.
- Create materials using GeoGebra for all educational levels that can be openly used by any teacher regardless their teaching level or workplace. For this purpose we are going to create several web sites or blogs to organize all this information.
- Inform our educational authorities about the work that is being done and its importance in the development of our teaching, as well as the impact that this work is having on our students.
- Encourage teachers to create video tutorials that explain their constructions and activities with GeoGebra. This will result in other teachers learning and improving.
- Foster and organize training courses about GeoGebra, and activities that encourage teachers to create new materials, in collaboration with the Teacher Training Centres (CFIEs), that are the partner agencies in teacher training. Last year there was already a GeoGebra course online in collaboration with the Junta of Castilla y León http://www.educa.jcyl.es/profesorado/es/formacion-profesorado/actividades-formacion-actividades-formacion-profesorado-tic/iniciacion-geogebra-ensenanza-matematicas.

It will continue next years.

- Establish contact mechanisms for all members of the teaching profession interested in GeoGebra.
- Organize once a year a GeoGebra Day that would take place in a different province of Castilla y León every time.
- Enable a forum through the Internet to put in contact teachers with common interests so they can develop some new educational materials with GeoGebra, and provide new ideas to other teachers, regardless their teaching level or workplace.

2.4 Certification

The IGCL would like to certify local GeoGebra users, experts and trainers. The requirements and procedures for this certification process would be the standard procedure described in the GeoGebra Certification Guidelines document and similar to those used by the Spanish GGB Network awarded certificates as GeoGebra Experts.

3 Signatures

The chair person of the applying GeoGebra Institute and a high ranking representative of its hosting institution (e.g.: departmental chair, dean of faculty at a university or teacher education college, director of an NGO) declare with their signatures that all information in this application is correct to their best knowledge and that they support the establishment of a GeoGebra Institute at their institution as described in this application.

Chair person of your GeoGebra Institute

José Manuel Arranz-SanJosé
Department of Mathematics
IES Europa
C/. Ramón Fernández Alegre 2
24403 Ponferrada (León), Castilla y León, SPAIN
Email: josemarranz@gmail.com
Telephone: +34 636099829
Signature:
Date: 30/07/2014

Chief Communicator of your GeoGebra Institute

Enrique Hernando-Arnáiz
Department of Mathematics
C. E. La Merced-Jesuitas
C/. Diego Luis de San Vitores 1
09002 Burgos, Castilla y León, SPAIN
Email: <u>qsaurio@yahoo.es</u>
Telephone: +34 629266324
Signature:

Date: 30/07/2014

Representative of hosting institution of your GeoGebra Institute

Antonio Bermejo-Fuentes
President of SOCYLEM "Miguel de Guzmán"
Head teacher and Professor of Mathematics in IES Antonio García Bellido
C/. Fraga Iribarne 39,
Armunia (León), Castilla y León, SPAIN
Email: abfmatesleon@gmail.com
Telephone: +34 659088123
A tentia
Signature:
Date: 30/07/2014

Application approved by

Markus Hohenwarter (<u>markus@geogebra.org</u>) President of the International GeoGebra Institute (<u>http://www.geogebra.org/igi/</u>)

Signature: Markus Hohenvorker

Date: 18 August 2014

ANNEX: CV of Staff from the GeoGebra Institute of Castilla y León

• José Manuel Arranz San José. josemarranz@gmail.com

Graduated in Physics for the University of Salamanca (1988).

Secondary Mathematics teacher and associate professor in the University of León.

Consultant in Mathematics at the Advisory Centre for Teachers and Resources of Ponferrada, León.

He has carried out numerous training courses for the application of ICT to the teaching of Mathematics (Excel, derive, Cabri, geogebra ...).

Numerous publications, innovation projects, research and development of training materials relating to the teaching of mathematics in secondary schools through ICT.

Several awards for works in didactics of Geometry with the computer:

Awards for the development of multimedia educational materials. 2004 Castilla y León:

Second Prize with the work "geometry for junior ESO". EDU/1947/2004 Order of 9 December. BOCYL December 30, 2004.

Awards for the development of multimedia educational materials. Castilla y León:

Third prize with the work "Movements in the plane. Mosaics ". EDU/1574/2005 Order of 24 November. BOCYL November 30, 2005.

Awards to several curricular educational materials in electronic format, which can be used and disseminated on the Internet, 2005. Consejería de Education and Science. (CNICE):

Second prize with the work "Course of Geometry. Order of 18 November ECI/3880/2005. B.O.E. of December 14, 2005.

Innovative teachers Educared, 2007 Award.

- As for his work with GeoGebra software:

Member of GeoGebra Institute of Cantabria.

Participant in the European project Intergeo integrated into the team at the University of Cantabria directed by Tomás Recio.

Co-author of the web www.geometriadinamica.es from G4D group.

Participant and member of the organizing team I GeoGebra Day held in Salamanca in September 2010, and Day II GeoGebra, Segovia 2012.

Support Advanced Course "The Secrets of GeoGebra" Castrourdiales, November 2013.

Participant in the VI Jornades L'Catalan Association GeoGebra. February 2014.

First Day organizing team GeoGebra Castilla y León, Soria, April 2014 Member.

Attendance at Annual Meeting of GeoGebra Institutes Iberian, Barcelona, February 2014.

• Antonio Bermejo Fuentes. abfmatesleon@gmail.com

President of SOCYLEM "Miguel Guzman", since 2009.

Graduated in Mathematics from the University Complutense of Madrid and Professor of Mathematics Corps of Secondary School Teachers.

• Enrique Hernando Arnáiz. <u>qsaurio@yahoo.es</u>

Graduated in Physics from the University of Valladolid (1995) and Diploma of Advanced Studies and Research Aptitude in Teaching Mathematics and Experimental Sciences from the University of Salamanca. His fields of interest are the History and dissemination of Mathematics and integrating technology into teaching and learning.

Teacher of Mathematics in C.E. La Merced-Jesuitas since 1995.

Teacher in the ESTALMAT project ESTALMAT, "Draft Early Detection and Stimulus Talent in Mathematic" (page 5), at its headquarters in Burgos since its inception in 2003, and project coordinator for Castilla y León since 2008.

He has taught several courses, workshops and imparted talks at various conferences and seminars in Mathematics education and published articles in national magazines on Mathematics education.

Co-author of the book "Mathematics in the Cathedral of Burgos," published in 2009 and author of the translation, revision and adaptation of the book "Mathematical Circles", published in 2012 by the Royal Spanish Mathematical Society in collaboration with SM Editorial, as the beginning of the publishing of its Mathematical Stimuli Collection.

Regarding experience with dynamic geometry software GeoGebra, this methodology is always present in his classes and works (and previously with Cabri Geometry), having completed the following courses:

-"GeoGebra in teaching mathematics" in the Institute of Educational Technology of the Consejería de Education (January-May 2011).

-Participant Day II GeoGebra, Segovia 2012.

- Representative of Castilla y León in the classroom course for experts "SECRETS of GeoGebra. ADVANCED METHODS" organized by the Spanish Federation of Teachers of Mathematics and the GeoGebra Institute of Cantabria (Castro-Urdiales, November 2013). -Member of organizing team I GeoGebra Jornada de Castilla y León, Soria, April 2014

• Rosa María Ruiz Núñez. mruiz@educa.jcyl.es

Graduated in Mathematics from the University of Zaragoza (1992).

Teacher of Secondary Education at Consejería de Education of the Junta de Castilla y León and Associate Professor of the University of Valladolid.

She has taught several courses, workshops and given talks at various conferences and seminars in Mathematics education and published articles in national magazines Mathematics education.

Consultant in the Technological Training area in the Center of Teachers and resources of El Burgo de Osma, Soria.

Lifelong Learning Adviser in sciences and technology at the Center of Higher Teacher Training of the Consejería de Education of the Junta de Castilla y León.

Member of the organizing team I Conference of GeoGebra Castilla y León, Soria, April 2014.

• Rubén Jiménez Jiménez. rujimenez05@gmail.com

Graduated in Mathematics from the University of Valladolid (1997) and graduated in Statistics (1999).

Teacher of Secondary Education at Consejería de Education of the Junta de Castilla y León since 2000.

Expert in GeoGebra software from the GeoGebra Institute of Cantabria.

Member of the organizing team I Conference of GeoGebra Castilla y León, Soria, April 2014 and speker "First steps with GeoGebra".

Tutor of several courses about GeoGebra, like "GeoGebra in teaching mathematics": Introduction and expert modules at Consejería de Education of Spain and at Consejería de reducation of the Junta de Castilla y León.

Creator and administrator of webs: www.socylem.es and http://www.iesarangurenavila.com.