

Photon11

Spa, Belgium

May 22–27, 2011

<http://www.photon11.be/>

**International Conference
on the Structure and the
Interactions of the Photon
including the 19th
International Workshop on
Photon-Photon Collisions.**



This conference is a part of the series initiated in 1973 in Paris, as an International Colloquium on Photon-Photon Collisions at Electron-Positron Storage Rings, devoted to the hadronic interaction of photons. The latest Photon conferences took place in [Hamburg/DESY](#) (2009), in [Paris](#) (2007), in [Warsaw](#) (2005), and in [Frascati](#) (2003).

At the conference, recent progress in understanding photon-photon and photon-proton processes will be presented. In addition, recent results on astrophysics and other related topics will be discussed. This year's conference will cover the following topics:

- Electroweak and new physics
- Jets, quarkonia and heavy flavours
- Photon structure
- Prompt photons
- Small x , diffraction, and total cross sections
- Exclusive channels and resonances
- Vacuum polarisation and light-by-light scattering
- Low-energy photon experiments
- Photons in astroparticle physics
- Photon collider prospects and new acceleration techniques
- Related topics

The first results and prospects of studying photon collisions at the LHC, as well as the physics potential of a future photon linear collider will play an important role in the topical sessions.

Important date:

May 19, 2011: Closing registration site

The conference will take place from May 22 to May 27, 2011, in Spa (Belgium). The first session will begin on Monday, May 23, at 9 a.m. The conference will end on Friday, May 27, around 2 p.m. The Sol Cress conference centre is located in a secluded forest area, within a stone's throw from the worldwide famous Spa thermal baths, and only 15 min walk through the woods from downtown Spa. In addition, Brussels, Liège and nearby towns offer many attractions, such as the F1 race circuit at Spa-Francorchamps.

Agenda

Sunday, May 22

16:00 In situ registration opens

Monday, May 23

08:30-09:00 Registration in situ

09:00-10:30 Welcome

+ Session on electroweak and BSM physics

10:30-11:30 Coffee break

11:30-13:00 Session on electroweak and BSM physics

13:00-14:30 Lunch

14:30-16:00 Hommage to Robert Brout – F. Englert

+ Session on electroweak and BSM physics

16:30-17:00 Tea break

17:00-18:30 Session on electroweak and BSM physics

19:00 Welcome drink

Tuesday, May 24

09:00-10:30 Session on QCD

10:30-11:30 Coffee break

11:30-13:00 Session on QCD

13:00-14:30 Lunch

14:30-16:00 Two parallel sessions: EWK/BSM and QCD

16:30-17:00 Tea break

17:00-18:30 Two parallel sessions: EWK/BSM and QCD

Wednesday, May 25

09:00-09:30 High energy photons from the cosmos: experimental aspects – J. Knapp

09:30-10:00 Astrophysics and fundamental physics with ultra-high energy photons – G. Sigl

10:00-10:30 Photon Collider project – V. Telnov

10:30-11:00 Coffee break

11:30-12:00 Laser technologies for high energy photon beams – F. Zomer

12:00-12:30 Generation of high-energy photons with large orbital angular momentum – V. Serbo

12:30-13:00 High-energy physics with photons carrying non-zero orbital angular momentum

– I. Ivanov

13:00-14:30 Lunch

14:30 Excursions/Free time

Thursday, May 26

09:00-10:30 Session on QCD

10:30-11:30 Coffee break

11:30-13:00 Session on QCD

13:00-14:30 Lunch

14:30-16:00 Parallel sessions: EWK/BSM (optional) and QCD

16:30-17:00 Tea break

17:00-18:30 Parallel sessions: EWK/BSM (optional) and QCD

19:30-23:00 Conference dinner

Friday, May 27

09:00-09:40 Plasma wakefield acceleration – A. Caldwell

09:40-10:20 LHeC project – Th. Schoerner-Sadenius

10:20-10:50 Coffee break

10:50-11:30 Summary and outlook for QCD – TBA

11:30-12:10 Summary and outlook for electroweak and BSM physics – Ch. Royon

12:10-12:30 Closing conference

12:30-13:30 Lunch

13:30-14:00 Departure

Program committee:

- for QCD-related talks:
 - L. Favart (IIHE-ULB, Bruxelles U.) lfavart@ulb.ac.be
 - I.P. Ivanov (IFPA, Liège U.), igor.ivanov@ulg.ac.be
- for talks related to electroweak interactions and physics beyond the standard model:
 - M. Klasen (Inst. Theor. Phys., Münster U.), klasen@lpsc.in2p3.fr
 - V. Lemaitre (CP3-UCL, Louvain U.), Vincent.Lemaitre@uclouvain.be
- for talks related to the photon collider:
 - J. Gronberg (LLNL, Livermore), gronberg1@llnl.gov
 - V. Telnov (IYF, Novosibirsk), V.I.Telnov@inp.nsk.su
- for talks related to photons in astroparticle physics
 - S. Schlenstedt (DESY, Zeuthen), stefan.schlenstedt@desy.de
- for talks on other topics:
 - J.R. Cudell (IFPA, Liège U.), jr.cudell@ulg.ac.be
 - K. Piotrkowski (CP3-UCL, Louvain U.), Krzysztof.Piotrkowski@uclouvain.be

Registration

The conference fee is 300 € for senior participants and 250 € for students. It will cover the conference proceedings, the conference dinner, the coffee break drinks and biscuits, five lunches and the welcome drink at Sol Cress.

Registration is via the indico page <http://agenda.phys.ucl.ac.be/conferenceDisplay.py?confId=924>, which can be accessed from the conference page <http://www.photon11.be>. The registration site will be closed on May 19 – thereafter a registration will still be possible in particular cases only, by contacting the organizers directly. In these cases the fees have to be paid on site **IN CASH** at check-in.

For early registration and payment received before May 6, the fee is reduced to respectively 250 and 200 €. The fee should be paid directly to the organizers, and the lodging reservation and its costs directly to SolCress (of course, there are possibilities of staying in Spa hotels).

Persons accompanying the participants can take part in the conference dinner for an additional fee of 40 €

Lodging

There are up to 140 places available at the Sol Cress conference centre for the Photon11 participants (<http://www.solcress.be>). The lodging reservation and payments should be dealt directly with Sol Cress (of course, there are also possibilities of staying in the nearby Spa hotels, please consult the web). The requests will be attended to by the first-come, first-served principle.

Please contact Ms Nancy Vertommen (n.vertommen@solcress.be) for the Sol Cress reservations, indicating your dates and accommodation preferences, and providing the code “PHOTON11”.

Book your rooms only by directly e-mailing to Sol Cress – on-line booking systems consider the facility fully booked as we have reserved all the rooms for the conference!

Room prices per night:

Single room: 100 €

Twin room: 75 €

Student room: 70 € (sharing with a minimum of 3 persons a studio/an apartment)

These prices include breakfast and dinner.



For families:

B&b:	Adult 50 €	child 12y+ 40 €	6-11y 35 €	2-5y 25 €
Dinner:	Adult 25 €	child 12y+ 17,40 €	6-11y 12,65 €	2- 5y 8,65 €

Proceedings

The proceedings will be electronic and open access.

Social Program

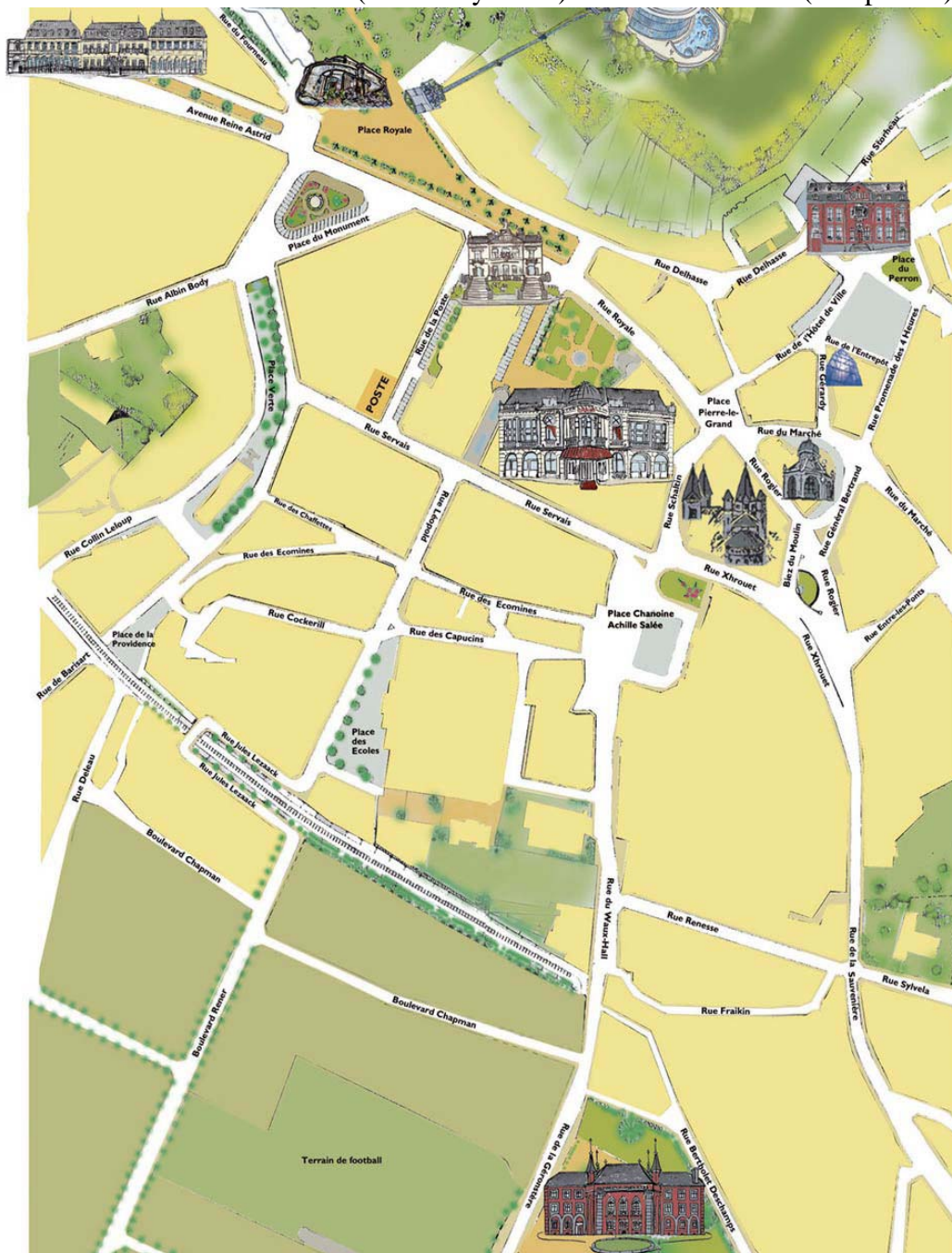
The social program includes:

- A welcome drink on Monday evening.
- An excursion on Wednesday afternoon (20 € to be paid at SolCress, and reserved with your room). We shall visit the nearby Abbey “Val-Dieu” (<http://www.val-dieu.com/>), built in 1216 by Cistercian monks, and famous for its brewery.
- The conference dinner on Thursday evening.

Travel information

The conference takes place at the "Domaine Sol Cress" near Spa

- info SOL CRESS: www.solcress.be/
- If you come by train:
 - Internet site of the belgian railroads: www.b-rail.be/ (Choose "Spa[B]" as stop station)
 - Once you are at Spa railway station, go for a ten minutes walk towards "Hôtel Radisson SAS Palace" (Place Royale 39). Take the funicular (1€/ person):



The train hub closest to Spa is Liège Guillemins. To get to Spa, you will need to change in Pepinster (25 minutes) or Verviers central (marked (v) in the schedule) and the total trip is about 1 hour minutes.

Departures from Liège are:

on Sunday: 06:36, 07:33, 08:36, 09:33, 10:36, 11:33, 12:36, 13:33, 14:36, 15:31, 16:36, 17:34, 18:36, 19:33, 20:36, 21:36

on weekdays: 07:08, 08:36, 09:30, 10:36, 11:33, 12:36, 13:30, 14:05 (v),15:05 (v),16:10,17:07,18:07,19:07, 20:07, 21:09

From Brussels airport:

You will have to go either to Brussels North, or Leuven, then take a train to Verviers central (direction Eupen, 1h 17), then a train to Spa (direction Spa-Geronstère, 24 minutes). The duration of the trip is 2h 29.

From Charleroi airport (Ryanair's "Brussels south")¹

You will have to take bus A to Charleroi south station, then go to Liège-Guillemins, and do as above. The trip takes about 3h 20.

Vocabulary: as Belgium is bilingual, you may need to know the translations into French and Dutch:

Brussels=Bruxelles (Fr)=Brussel (D)

Liege (Fr)=Luik (D)

Louvain(Fr)=Leuven (D)

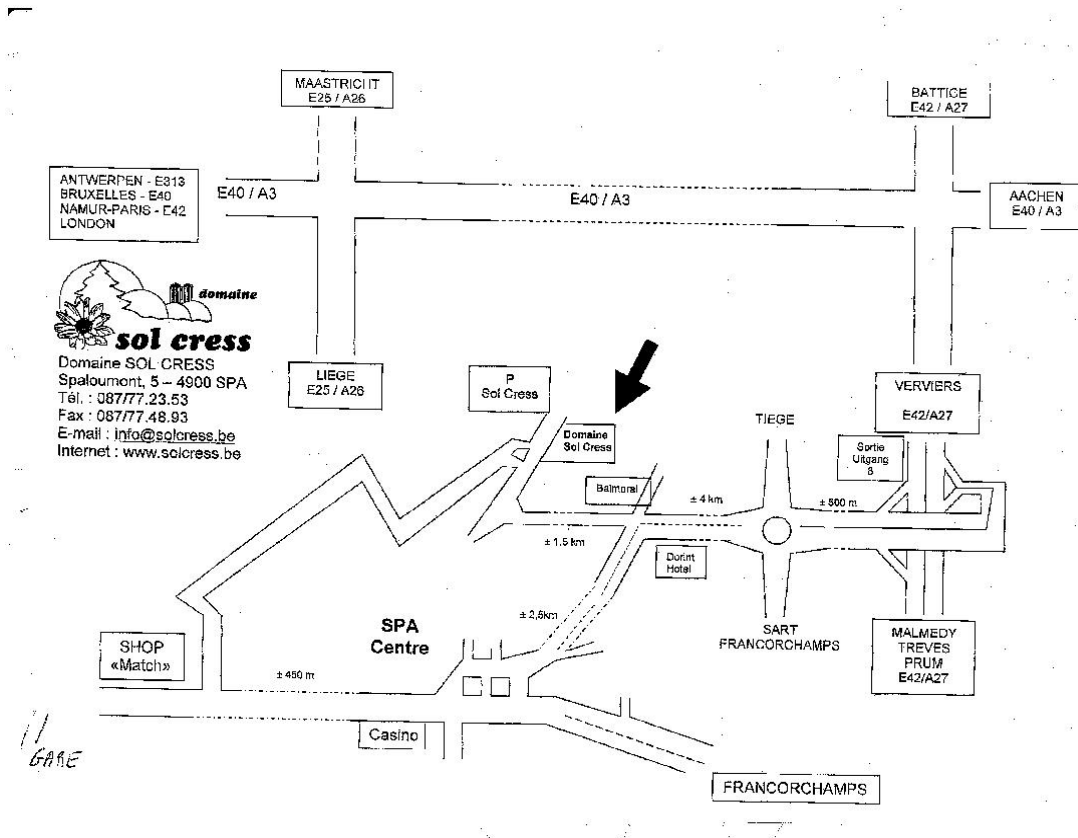
South=Sud (Fr) or Midi (Fr)=Zuid (D)

North=Nord (Fr)=Noord (D)

¹ Ask for the 'Charleroi Airport' return (code 815) or single (code 811 or 814) ticket at the ticket desk. It includes the bus to the station. There are two ticket dispensers where you can buy a single valid for "any Belgian destination" for a maximum amount of 19,60 EUR single in 2nd class and 30,00 EUR single in 1st class. This ticket covers a journey in a TEC bus (from the airport to Charleroi-Sud station) and a train journey (from Charleroi-Sud to any station in Belgium). The two ticket dispensers are placed outside the airport, near Door 2. Two methods of payment are accepted: cash or credit/debit card.

- If you come by car:

type “Sol Cress” in google maps



- Shuttles:

On Sunday **May 22** from a shuttle service will be organized to bring participants from the Brussels-Zaventem airport to SolCress – at the Brussels airport exit gate a contact person with the sign “PHOTON 2011” will be waiting for the participants. A mini-bus will be leaving to the conference site four times, at **16:00, 18:00, 20:00 and at 22:00 (CET)**.

In addition, a shuttle from the Spa train station to the conference site will be available on May 22 between 4 and 8 pm.

Leisure time



Thermal waters: « Les Thermes de Spa » are situated only 200 m from SolCress
(<http://www.thermesdespa.com/>)

Special price: €15,00/person/3 hours.

The word “spa” indeed comes from Spa ! Known in Roman times and mentioned by Pliny the Elder, the springs were rediscovered in 1326 and have been frequented since the 16th century. Spa reached its zenith in the 18th century, when it was visited by European royalty. Though other sources of healing hot mineral springs have become famous throughout the world, it is the town of Spa which has become eponymous with any place having a natural water source that is believed to possess special health-giving properties. The place's name is from Walloon *espa* meaning "spring, fountain."

SolCress proposes ‘The road of the springs’: half-day circuit on a moped - this route will guide you to five natural springs, via sinusoid paths and vast forests...

Price €80,00 (10:00 – 18:00), including fuel, insurance and a map.

Contacts

The conference address:

<http://www.solcress.be>

n.vertommen@solcress.be

SolCress

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Local Organizing Committee:

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International Advisory Committee

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