April 11, 2015

First International Conjunction Assessment Workshop
May 19-20, 2015
CNES HQ
2 place Maurice Quentin
Paris, France

Draft program

The first International Conjunction Assessment Workshop will take place on 19-20 MAY 2015 in room "Espace", at CNES HQ in Paris.

The objectives of this CA Workshop are:

- To bring together operational actors directly involved in the management of on-orbit collision risks
- To provide opportunities for networking and technical discussions
- To share practices and feedback on CA risk assessment
- To identify difficulties and possible remediation

The workshop is unclassified. Presentation materials will be made available to participants after the workshop.

Tuesday, May 19

13:15 - 13:50	**Registration, Coffee**
13:50 - 14:00	**Welcome and Introduction** MOURY Monique, CNES, France
14:00	**DATA SESSION** Chair: BERTHIAS Jean-Paul, CNES, France
14:00 - 14:20	**JSpOC process** MCKISSOCK Diana, JFCC SPACE, USA
14:20 - 14:40	**Conjunction assessment for GEO satellites: ISON experience of using orbital data produced from own measurements** AGAPOV Vladimir, Russian Academy of Sciences, Russia
14:40 - 15:00	**Improved CA via the Commercial Space Operations Center (ComSpOC)** OLTROGGE Daniel + AVES Peter, AGI, USA
15:00 - 15:20	**CDM Overview - the JSpOC Implementation** ERICSON Nancy, AFSPC, USA
15:20 - 15:40	Discussion
15:40 - 16:10	**Coffee - Posters**

16:10 **TOOLS SESSION**
Chair: NEWMAN Lauri, NASA GSFC, USA

16:10 - 16:30 **Constrained optimal collision avoidance strategies for multiple conjunction events**
DUNCAN Matt, SpaceNav, USA

16:30 - 16:50 **Collision risk assessment and avoidance manoeuvre strategies for satellites: CORAM tool**
SANCHEZ-ORTIZ Noelia, DEIMOS, Spain

16:50 - 17:10 **CSA On-Orbit Collision Risk Management Tools, Procedures & Experience**
BABIKER Fathelrahman + ABBASI Viqar, CSA, Canada

17:10 - 17:30 **Improvement of the KARISMA for the commercialization**
CHO Dong-Hyun, KARI, Korea

17:30 - 17:50 **JAC, conjunction assessment**
LAPORTE François, CNES France

17:50 - 18:10 Discussion

18:10 - 20:00 **Networking Buffet Dinner**

Wednesday, May 20

8:45 - 9:10 **Coffee**

9:10 **LEO FEEDBACK SESSION**
Chair: HEJDUK Matt, Astrorum Consulting, USA

9:10 - 9:30 **Collision management & SPOT 6-7 operational assessment**
BONAVENTURE François + DESMAZIERES Yves,
Airbus Defense and Space, France

9:30 - 9:50 **Radarsat2 conjunction analysis and mitigation operations**
LAMBERT Casey, MDA GSI, Canada

9:50 - 10:10 **Operational collision avoidance at ESOC**
FLOHRER Tim, ESA ESOC, Germany

10:10 - 10:30 **Operational Collision Risk Management for the S-NPP Spacecraft**
NAIR Shiju, NOAA, USA

10:30 - 10:50 **IRIDIUM's Maneuver Pre-Screening Process to Minimize the Aggregate Probability of Collision**
SHEPPERD Ryan, BOEING, USA

10:50 - 11:20 **Coffee - Posters**

11:20 - 11:40 **10-Years of EOS Operational Collision Avoidance**
GUIT Bill, NASA GSFC, USA

11:40 - 12:00 **EUMETSAT's LEO Conjunction Risk Forecast Operations and Avoidance Strategy Revisit**
LAZARO David, EUMETSAT, Germany

12:00 - 12:20 **Collision Avoidance in LEO : from general concept to individual realities**
FREMEAUX Claire, CNES, France

12:20 - 12:40 **Conjunction Assessment for DigitalGlobe's Commercial Imaging Satellite Constellation**
ENGELHARDT Doug, DigitalGlobe, USA

12:40 - 13:00 **Operation Results of Conjunction Assessment and Mitigation for the GSOC Satellites**
AIDA Saika, DLR GSOC, Germany

13:00 - 13:10 Discussion

13:10 - 14:40 Lunch
Restaurant "Le Chien Qui Fume"

14 :40 SYSTEM SESSION
Chair : DECOUST Camille, MDA GSI, Canada

14:40 - 15:00 **Recent Upgrades of ESA's Collision Avoidance Tools and Processes**
MERZ Klaus, ESA ESOC, Germany

15:00 - 15:20 **CAESAR**
MOURY Monique, CNES, France

15:20 - 15:40 **Conjunction Assessment for JAXA satellites**
IKEDA Hitoshi, JAXA, Japan

15:40 - 16:00 **CARA Overview and Screening Volume Analysis**
NEWMAN Lauri + HEJDUK Matt, NASA GSFC, USA

16:00 - 16:20 Discussion

16:20 - 16:50 Coffee – Posters

16:50 GEO FEEDBACK SESSION
Chair: ZAMORA David, EUTELSAT, France

16:50 - 17:10 **Conjunctions handling for the geosynchronous fleet at EUMTSAT, with support of optical data**
PESSINA Stefano, EUMETSAT, Germany

17:10 - 17:30 **How to avoid large debris in geostationary orbit: Yahsat's Encounter Process**
BAKER John, YAHSAT, United Arab Emirates

17:30 - 17:50 **Current State of Conjunction Monitoring for Satellite Operators and the Steps Forward**
CHAN Joe, INTELSAT, USA

17:50 - 18:00 Discussion

18:00 - 18:20 Goodbye

Posters:

- **ESA's Conjunction Prediction Service and end-to-end testing**
  Diego ESCOBAR, GMV, Spain
- **SMARTnet: First Results**
  Hauke FIEDLER, DLR-GSOC, Germany
- **GMV'S conjunction analysis tool CLOSEAP**
  Felipe JIMENEZ, GMV, Spain
- **Middle Man, CAESAR and CARA examples**
  Monique MOURY and Lauri NEWMAN, CNES and NASA-GSFC, France and USA
- **PREEMPT and PREEMPT-Manager:**
  Web Tools for Visualizing and Managing Conjunctions Events
  Daniel NOVAK, CGI, Germany
- **Astrometry of geostationary objects**
  Erika ROSSETTO, STARONE, Brazil
- **Comparison of Collision Avoidance Activities based on TLE or CSM information**
  Noelia SANCHEZ-ORTIZ, DEIMOS, Spain
- **Web-based CA collaboration**
  Matt DUNCAN, SpaceNav, USA
- **ASAL's experience with management of collision risks and debris mitigation**
  Nadir BOUANANI, ASAL, Algeria
- **SpOD : a Web collaborative work environment dedicated to conjunctions analysis**
  Stéphane CHRISTY, CNES, France
- **Orbit determination and maneuvering for propulsionless cubesats in LEO**
  Henry HALLAM, PLANET, USA
- **Collision Avoidance and Risk Assessment for Chinese Satellites**
  Xu YANG, NAO CAS, China

Practical information:

CNES facilities

Headquarters

CNES administrative operations are directed from the CNES headquarters in Paris. Administrators at headquarters, together with the overseeing ministries, establish and promote CNES's policy. They also define strategic guidelines for the agency's technical centres and its relations with outside partners.

CNES headquarters in Paris - © CNES/E.MARTIN

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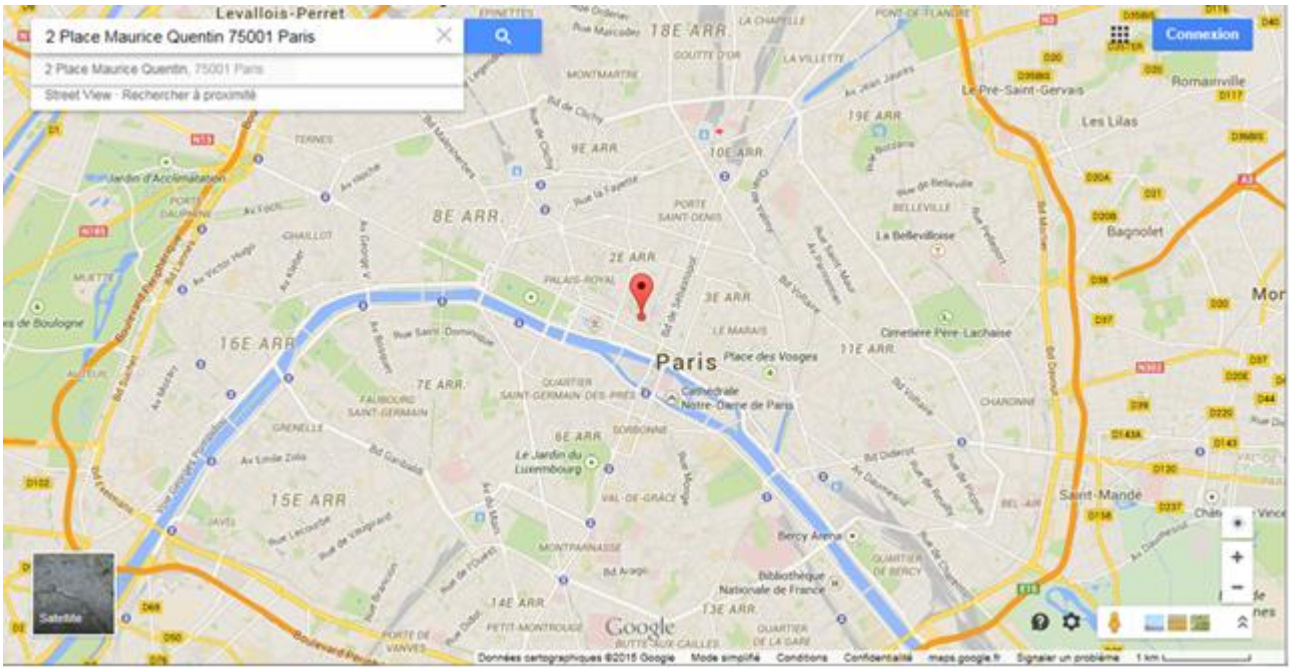

Sorry, we cannot provide recommendations for hotels.