



Winning the Hearts of Students for Astronomy & Science

Ganar los corazones de los estudiantes de Astronomía y Ciencia

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Winning the Hearts of Students For Astronomy



- I Who is Sirius?
- II What is science, what is scientific culture?
- III How to make science popular?
- IV A Unique Contest in Scientific Culture...
 - ...with a very unique prize

Astronomy, the Science of:

- The (most) beautiful
- The (most) mysterious
- The (most) adventurous...
- The (most) "spiritual": Asking existential questions
 - about yourself
 - your place in the Universe,
 - about its creation...
- ...of the ever unfolding news:

Higher z, largest BH, faintest galaxy, most Earthlike planet...

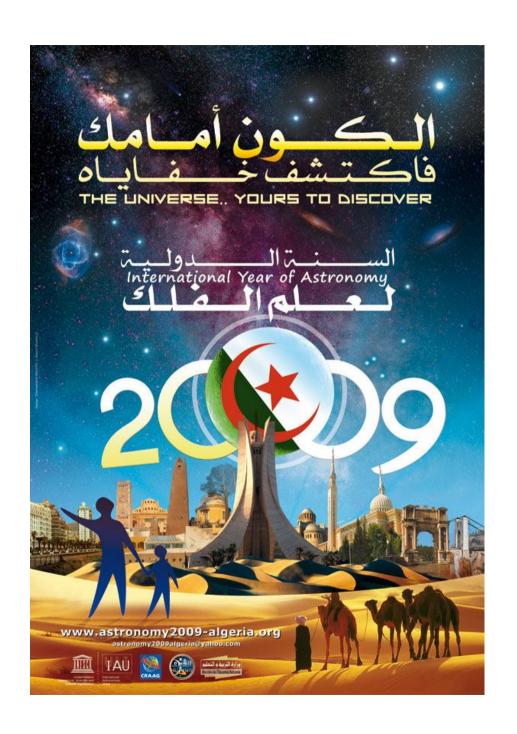


Astronomy

The science which draws:

The grand picture, the grandest of all! And establish the grand connections...

- It is by far the easiest science to popularize.
- The only discipline which can fire up people's imagination, and make science palatable to the general public.



Who is Sirius?

A Bright Star in the North African Sky!

The membership: students, professionals, unemployed...



The Outreach Activities...



...all over the country



Yearly National Festival in Popular Astronomy



Yearly National Festival in Popular Astronomy



International astronomy gatherings



Cirta-Science Radio Show:

« The Oasis of Science » واحة العلوم

- Live weekly one hour long segment on local FM Radio
- Going on for 16 years, many guests from all over the World
- All the sciences covered, with a strong emphasis on Astronomy
- -- Heard all over several states







International Partners







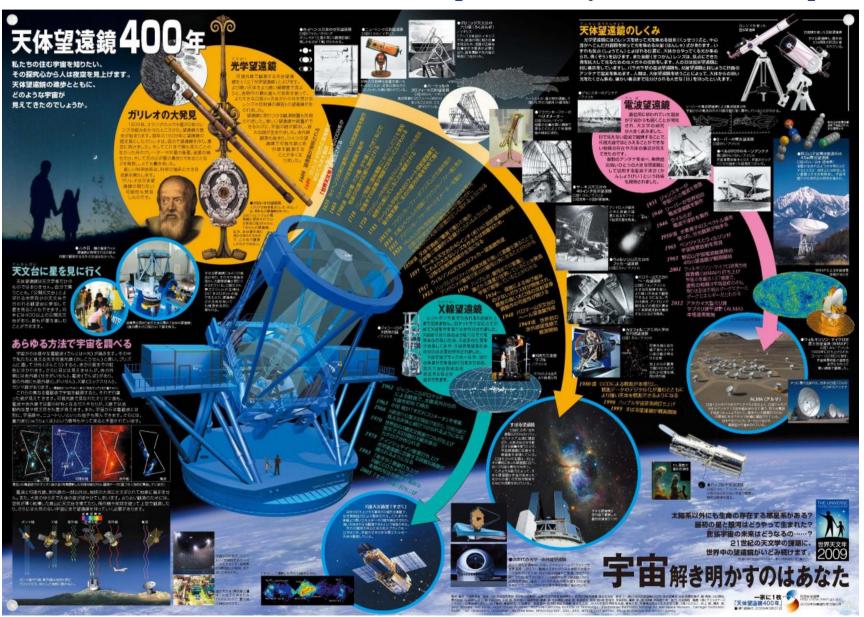






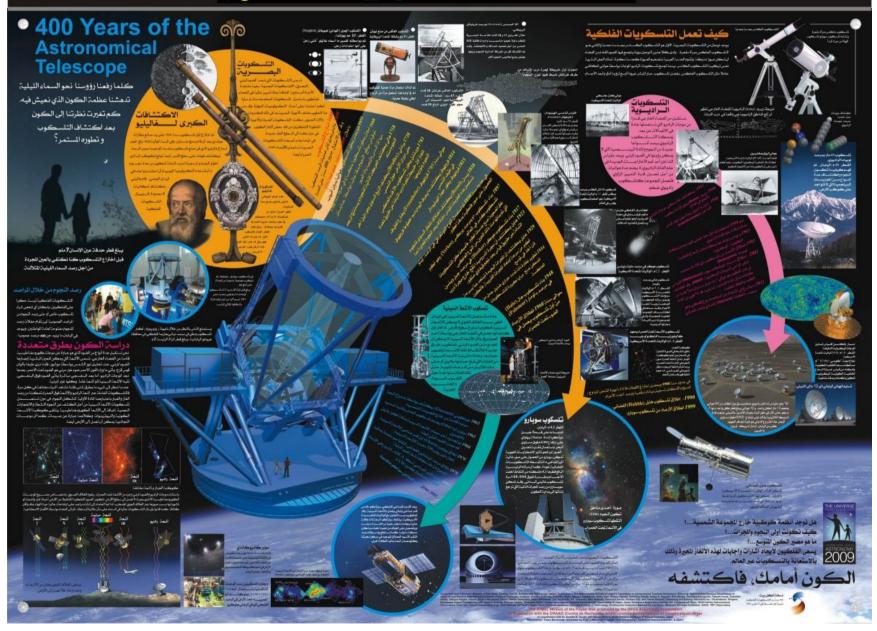
Collaboration with the NAOJ- Japan

Translation into Arabic of their famous poster: 400 years of the Telescope



Collaboration with the NAOJ- Japan

400 سنة على اثترائح التلسكوب



IYA 2009

Sirius : the winner of the Award Six for the Most Publicized 100 Hours of Astronomy competition.





IYA 2009

One of the gatherings during the "100 hours of Astronomy" competition.



Dark Skies Africa

We are part of the <u>GLOBE at Night</u> program, hosted by the U.S. <u>National Optical Astronomy Observatory</u> (NOAO)

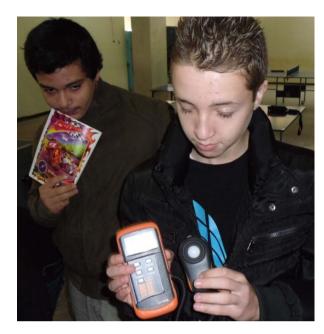
It is an international citizen-science campaign to raise public awareness of the impact of light pollution.

Project leader: <u>Dr. Connie Walker</u>







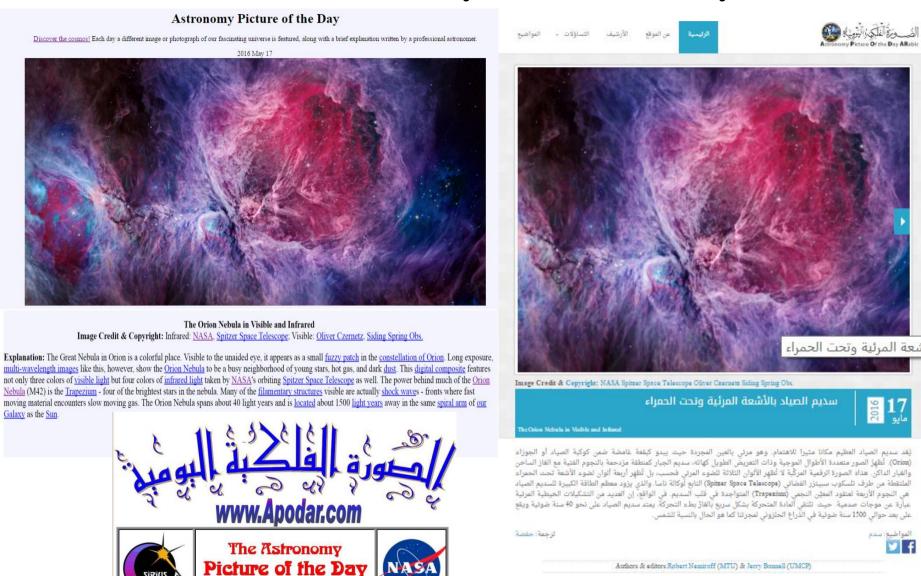








We set up a mirror site in Arabic of APOD: APODAR: Astronomy Picture of the Day ARabic



Arabic Mirror

Our Scientific Theater team

Each year: one to two theater plays





CAP 2016, Medellin Colombia, 16-20 May

The Sirius Astronomy Association



- So many other outreach activities...Check at:

http://siriusalgeria.net/

- Indeed, a Bright Star in the North African Sky

... of course Sirius A!

2- What is Science? What is Scientific Culture?



- Scientific culture is neither Science
- (No production of knowledge), nor Culture (Yet entertaining...) although it ought to be considered such.
- Science: How things work?
 Not the Why which is thought to be inaccessible.
- **Engineering**: How to makes things work

Science is opening the Black Box of a process, not in an engineering sense, but in the cognitive way in order to find:

what are the great general principles behind its working?

How to Make Science Popular?

- Science in order to flourish, needs favorable soil, constant nurturing...
- ... which is mostly what is lacking in the developing countries.

We at Sirius conceived a high gear contest, well advertized, with a prestigious prize..

To motivates, creates scientific vocations...

It is the yearly Cirta-Science Competition in Scientific Culture

The Competition itself



- The first round: ~ 600 students:
- 12 best students from 55 High School of the Constantine governorate
- The second round: ~ 60 students



Some Posters of the past competitions



This year: Trinity College, Greenwich Obs, Jodrell Bank, Stonehenge...



Year 2015: ITER fusion reactor, OHP 29 observatory, Pont d'Avigon, Nice Obs...



Year 2014: LHC collider at CERN, Paul Scherrer Institut (PSI) at Zurich, Einstein's home at Bern...



Year 2013: Nobeyama Radio Observatory and Mount Fuji in Japan...

- The three laureates, one for each level, are announced on National Science Day: 16 May of each year
 - Often the ceremony is on the national TV news



Great media coverage: TV, radio, written media...



ستكون وطنية وتنظم بقسنطينة

المتفوقون في مسابقة جمعية الشعرى موعودون برحلة الى محطة "النازا"

قائمة الفائزين من ثلاثة الى تسعة فائزين ، حيث سيكون من حيظ الثالثة في الاقسام الثالثة الثانية والثالثة ثانوي)الم العربي الثاني لهو اة علم الفلك و للاشارة سبتم الإعلان عن ا الفائزين في الدورة الثانية للمسابقة العلمية الكبـــرى يوم 16 أفريل المصادف لاحتفالات يوم العلم. و قد نظمت المسابقة بالتنسيق مع مديرية التربية ومديرية الشبا الرياضة بمساعدة الخطوط الجويا

الفيزياء، الكيمياء، العلوم الطبيعية ، علم الفلك ، علم الارض ، جغر افيا،تاريخ الانسانية وترجمة

رضائهم عن نوعية الاسكلة فيما أعتبرها البعض الأخر صعبة و بدرى عليهم الياس و التحوف من عدم الحصول على العلامات الكافية للفوز باحدي المراتب الثلاث الأولى التي قد تمكنهم من فرصة المشاركة في رحلة الى المنشات الفضّائية لَّو كَالَة الفضاء الأوروبية " إيز ĒSĂI "بهولوندا و مركسز تدريسب رواد الفضاء

بكولونيا بالمانيا. و أكد رئيس جمعية الشعري توسيع

هذه الرحلة وذلك بقصد تصفيز الطلبة و الطالبات على التعمق في العلوم وتشجيعهم على المطالعة. و كان حوالي 60طالب و طالب الموعد بقصر الثقافة مالك حداد لمواصلة الدور الثاني من تصفيات المسابقة العلمية الكبرى التي نظمتها جمعية الشعرى. و في الأجواء التنافسية المفعمة بالحماس و التركيز الكبير أجاب الأولى و تفوقوا على زملانهم الذي فاق عددهم 450 طالبا و طالبة على 27 سُـو الاعلميا في مختلف المجالات العلمية و الثقــــافية (

المسابقة العلمية الكبرى لن تبقى محلية و انما ستكون وطنية ابتداء من السنة المقبلة و ستكون جائزة المتفوقين في طبعة 2009زيارة للمحطَّة الفضائية "تازا."

و قبال الدكتور ميموني و هو رئيس الفضاء والفلك علمى هآمش قصر الثقافة مالك حداد غاية الأسبوع بأن جمعيته قامت لْمنَح المتفوقين في الْمشاركة في El Watan - Vendredi 21 - Samedi 22 mars 2008 - 21

SCIENCES ET TECHNIQUES

LES LAURÉATS SERONT CONNUS LE 16 AVRIL PROCHAIN

Premier concours scientifique pour les lycéens à Constantine

Les trois premiers gagnants auront la chance de bénéficier d'un voyage au Centre des essais spatiaux de l'Estec (Centre européen de recherche et de technologie spatiale).

est la Journée du savoir, mercredi 16 avril, que seront connus les gagnants du grand concours scientifique organisé par l'association Sirius d'astronomie à Constantine. «Une première en Algé rie et en Afrique, explique Jamal Mimouni, son prési dent musaue nous avons sé lectionné les participants dans 45 lycées d'après leurs bulletins scolaires du premier semestre.» Au total, les 500 meilleurs élèves de seconde, première et terminale de la wilaya de Constantine - 12 par lycée et 4 par niveau - ont été retenus. Culture générale, littérature française, géopolitique, grandes personnalités qui ont marqué la science mondiale... A ensuite suivi l'épreuve des questions à choix multiples avec photos et animations projetées sur écran géant. «Il n'y avait aucun calcul à effectuer, ni aucune connaissance particulière du cursus scolaire à maîtriser, précise Jamal Mimouni, mais une honne dose de culture générale et de questions montrant leur maîtrise du français et de l'anglais était nécessaire.»

La correction a mobilisé une

cinquantaine de personnes

parmi les jeunes de l'associa-

tion avant cinq à six ans d'ex-



nérience «La nhase finale des éliminatoires est en cours : nous avons sélectionné les 60 meilleurs co- chance de gagner un voyage pies et nous devons désor-

désigner mais meilleurs » Les trois premiers gagnants auront la

les de l'Estec (Centre européen de recherche et de technologie spatiale) en Hollande et au Centre d'entraînement au Centre des essais spatiaux des astronautes européens à

Cologne. Ce n'est pas tout :

les six gagnants suivants

(deux pour chaque niveau) pourront participer à la caravane scientifique de l'association Sirius d'astronomie qui partira au Congrès international d'astronomie ama teur à Tripoli, en Libve, du 3 au 6 août prochain. D'autres lots - micros, livres - sont également prévus. «Ce concours est une première étape vers un projet plus ambitieux : l'organisation d'un concours national dès l'année prochaine si les circonstances le permettent. Nous travaillons en ce moment sur la finalisation du prix - encore secret - qui promet d'être encore plus remarquable.» Mélanie Matarese

UNE CULTURE GÉNÉRALE TROP FAIBLE!

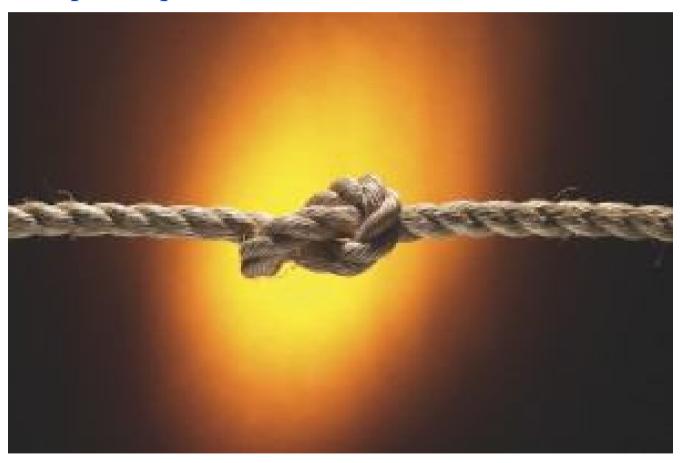
Ou'est-il ressorti de ce concours ? «Un niveau de culture générale très faible!, confie Jamal Mimouni. Même parmi les élèves qui ont des bonnes notes. A croire que la culture est un autre monde, parallèle au cursus scolaire, mais dans lequel ils ne baignent pas. Ils ne lisent pas les magazines scientifiques, ils ne hachotent que leurs manuels scalaires. Et ils nous le disent : "On ne savait

pas que c'était important!"» Les ieunes membres de l'association ont d'ailleurs été écartés du concours car ils se retrouvaient dans le peloton de tête des meilleurs dos siers. «Pour que notre concours ait une crédibilité et parce qu'on sait que, rôdés à des manifestations scientifiques, ils auraient gagné haut la main, nous avons choisi de ne pas les faire participer...»

Pour en savoir plus : cirtascience.110mb.com ou siriusalgerie.110mb.com

Test in Scientific Culture for our Science Communicators

Sample of questions asked at Cirta Science contests

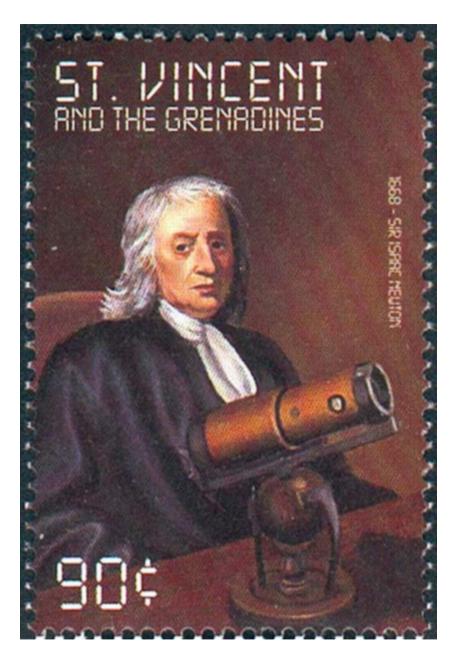




CAP 2016, Medellin Colombia, 16-20 May



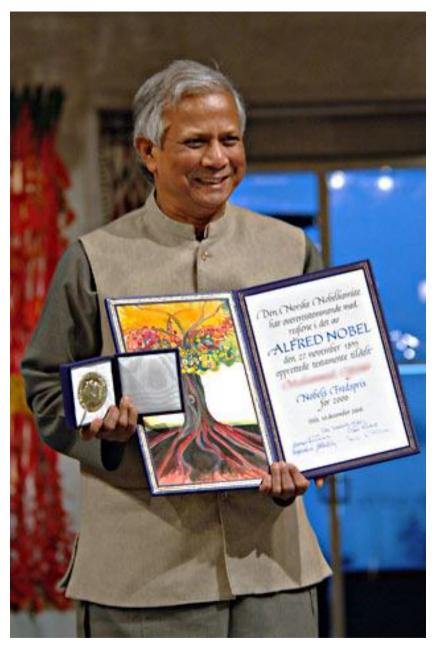
The QCM: Is it a volcano eruption, a forest fire , a comet...



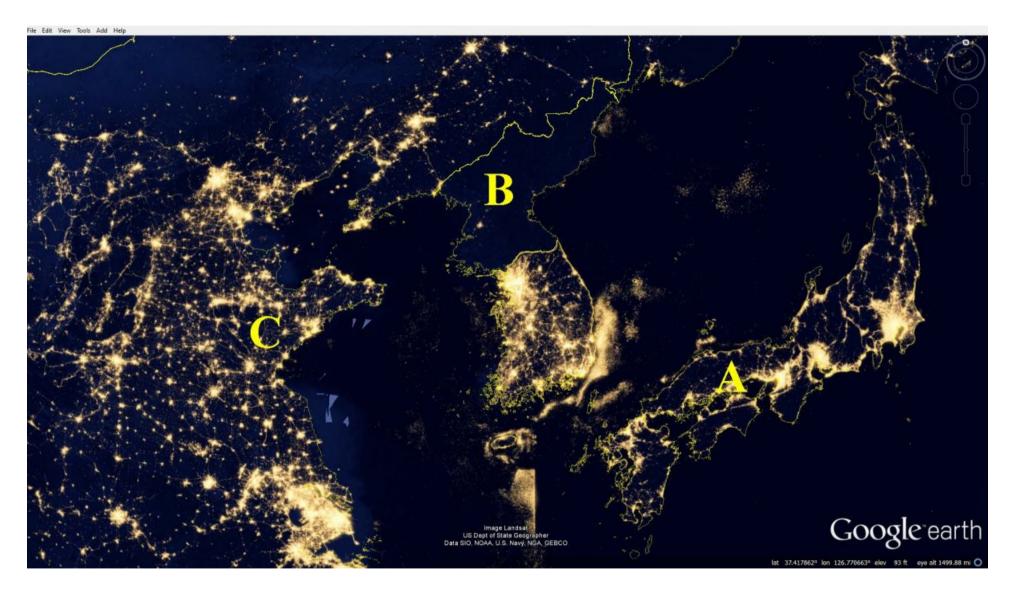
Who invented the reflecting telescope?



In 2012: A giant who opened up the space travel died this year. Who is he?



A Nobel prize was attributed to the \ll Prince of the Poors \gg for creating a large scale microfinancing system . Who is he and from which country?



Identify the countries labeled A, B and C. Why has C such a low brightness level?



In Algeria: What is the Montain range we see above the middle of the picture? What is the city we see at left?



What is the closest big Island to the Algerian coast just below Corsica island?

Testing the linguistic skills...

« Translate into Arabic those sentences... »

"Get your facts straight, then distort them at your leisure"

Mark Twain

"We all know that the real reason
Universities have students is in order
to educate the professors"
Sir John Archibald Wheeler

Translate into Arabic or English...

"Celui qui peut agit. Celui qui ne peut pas, enseigne. Celui qui ne sait pas enseigner ecrit des manuels de pédagogie." George Bernard Shaw + George Steiner

Translate into French or English...

لا يجِد الأحمق لذة الحكمة كمة كما لا يلتذ بالورد صاحب الرّكمة

The Reward! Year 2008



Visit to the ESTEC Center in Holland



Testing the Herschell IR telescope of ESA before launch



GOCE gravimetric Earth skimming satellite

... and at the European Astronauts Training Center (EAC) Cologne- Germany





The Total Solar Eclipse 2009, China





16-20 May





CAP 2016, Medellin Colombia, 16-20 May

Visit to the SALT Telescope, RSA, 2010





CAP 2016, Medellin Colombia, 16-20 May

Gran Telescopio Canarias: 2011





Nobeyama Radiotelescope and Mount Fuji, 2013





CAP 2016, Medellin Colombia, 16-20 May

At CERN-LHC, 2014

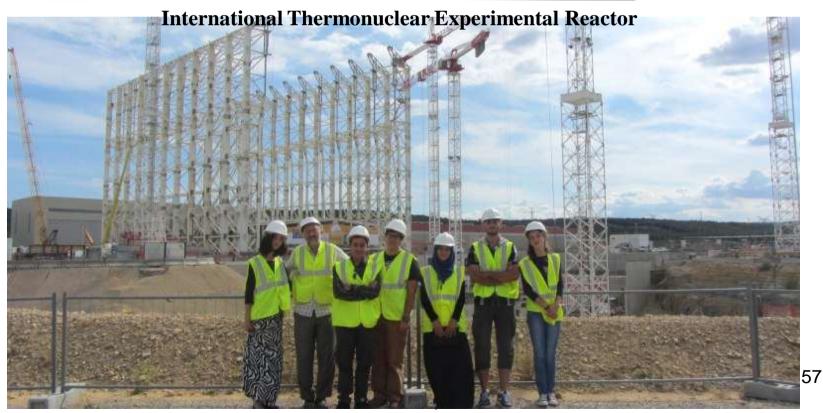


At the CMS Detector, way underground



At ITER & OHP- Cote d'Azur, Fr, 2015





At CEA Cadarache, next to Tore Supra in military zone!



At OHP: where the first exoplanet was discovered



Shooting at the Moon: Plateau de Calern





10-20 May

Next big competition, nation wide this time: « Race to Space 2016 »



The laureates to be announced on June 24 2016: Six places to the Space Camp at Huntsville, Ala





Conclusions

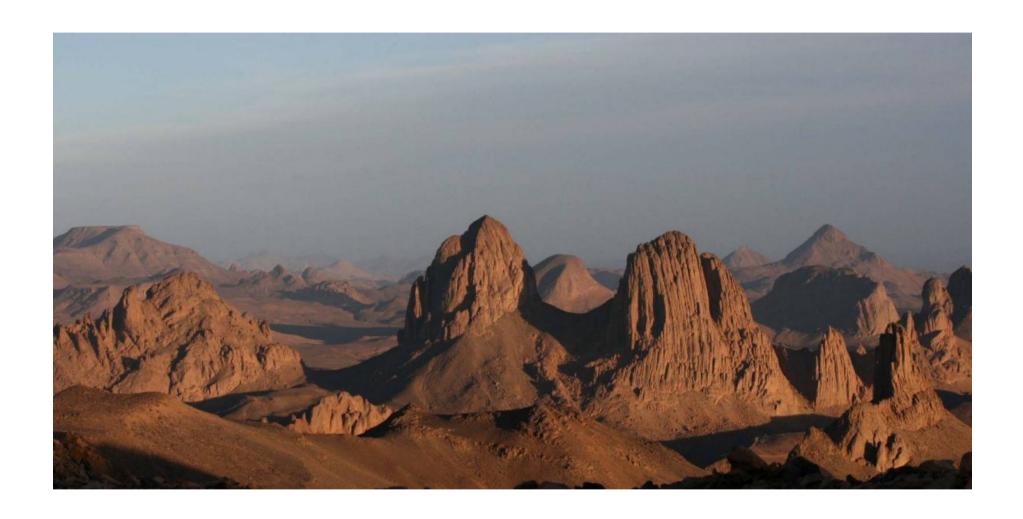
- Innovative initiatives which make young people go for science should be encouraged
- This Cirta-Science competition in scientific culture is a killer among high school students and has a high potential to motivate for science in general and astronomy in particular.

Could possibly be implemented in other countries

Now I have a dream...

The Sirius team in the Hoggar





From the Hoggar, Algeria with Love

Abdeldjalil Djarri, Sirius Astronomy Association



Dreaming of space ...



