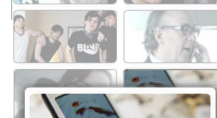
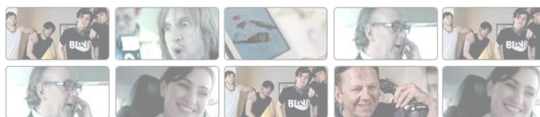




welcome
to the
human
network.



innovations report

Forum für Wissenschaft, Industrie und Wirtschaft

Hauptsponsoren:

SIEMENS

n-tv

Postbank

Datenbankrecherche:

Fachgebiet (optional):

GO

[Home](#) [Über uns](#) [Media](#) [English](#)

FACHGEBIETE

SONDERTHEMEN

FORSCHUNG

B2B BEREICH

JOB & KARRIERE

SERVICE

NACHRICHTEN & BERICHTE

Agrar- Forstwissenschaften
Architektur Bauwesen
Automotive
Biowissenschaften Chemie
Energie und Elektrotechnik
Geowissenschaften
Gesellschaftswissenschaften
Informationstechnologie
Interdisziplinäre Forschung
Kommunikation Medien
Maschinenbau
Materialwissenschaften
Medizintechnik
Medizin Gesundheit
Ökologie Umwelt- Naturschutz
Physik Astronomie
Studien Analysen
Verfahrenstechnologie
Verkehr Logistik
Wirtschaft Finanzen

Weitere Förderer

EnBW Roland Berger
Strategy Consultants

Audi SCHOTT
glass made of ideas

DAIMLER Heraeus

TOYOTA PEUGEOT

kfw
KREDITSTIFTUNG
DEUTSCHE BÖRSE
GROUP

Mindjet Dräger

WITTENSTEIN RITTAL

BMW Group KABA

software

WISAG
Building Management

THE LINDE GROUP pco.

VATTENFALL

GFT
THE ENGINEERS OF IT

Q.CELLS

KPMG PHILIPS

Allianz BEHR

tisoware
ZEITWIRTSCHAFT

[Ads by Google](#) [Nine Planets](#) [Galaxies](#) [NASA Picture](#) [Milky Way](#) [9 Planets](#)

[Home](#) → [Fachgebiete](#) → [Physik Astronomie](#) → [Nachricht](#)

Galaxy Collision Debris a Laboratory to Study Star Formation

05.06.2008

Researchers have shown that the process of star formation in areas of debris formed when two galaxies collide is essentially the same as star formation inside galaxies, meaning that the intergalactic medium can be a used as a simpler, more accessible laboratory for the study of stellar evolution.

Anzeige



An international team of researchers led by Médéric Boquien of the University of Massachusetts Amherst has shown that debris formed when two galaxies collide makes a simpler, more accessible laboratory for studying the process of star formation. The team presented their results at a press conference Monday, June 2 at the American Astronomical Society meeting in St. Louis, Missouri.

When We Left Earth

Never Before Seen
Footage of NASA
Begins June 8 at 9 e/p
on Discovery
discovery.com/nasa

IMDS Training,
Consulting

und Service:
europaweit, von EDS
autorisiert.
www.imds-professional.c

"Surprisingly, we found that star formation is essentially the same in galaxies and in the debris which occurs between galaxies, in spite of tremendous differences in the environment," says Boquien, a post-doctoral researcher in the astronomy department. "This is a very exciting result, meaning that we can use these regions, which are located outside a pre-existing stellar disk and are much simpler than star forming regions in galaxies, to study the creation of stars."

Additional members of the team include Pierre-Alain Duc of the National Center for Scientific Research in France, Frédéric Bournaud of the French Atomic Energy Commission, Jonathan Braine of the Bordeaux Observatory, Vassilis Charmandaris of the University of Crete, Greece and Ute Lisenfeld at the University of Granada, Spain.

Collision debris is the remains of a collision between two or more galaxies, in which the interplay of gravity can create long expanding "tidal tails." This debris, which is ejected into the intergalactic medium located between galaxies, is composed mainly of gas and dust stripped from their parent galaxies. They can be as heavy as several billion suns, and serve as a reservoir that feeds star formation. The most massive of these star forming regions, called tidal dwarf galaxies, can be bound by their own gravity and rotate.

Barely studied since their discovery in the 1950s, these areas have sparked increasing interest from astronomers, and were recently used to test the nature of dark matter. What was not known was whether star formation was the same in collision debris as it was in galaxies, a key factor in determining their usefulness in the study of star formation.

To answer this question, Boquien and his team observed a carefully selected sample of six interacting galaxy systems located a distance of 55 to 375 million light years from Earth. The study focused on extreme systems in which a large fraction (up to 85%) of star formation takes place in collision debris, rather than in the main body of the parent galaxies, a situation that is representative of the distant, young Universe.

ThyssenKrupp VDM
A company of ThyssenKrupp Steel AG

matrix42

TRUMPF

Sur Tec

businessAD

Johnson Controls

evolution robotics

BBK

ite

FLIR SYSTEMS

Parmaco
Metal Injection Molding AG

CIVOS

KERCKHOFF KLINIK

GFOS

Deutsche Bank

RIEGLER
Druckluft, Ideen und mehr

MM Industrie Magazin

Dresdner Bank
Die Beraterbank

maschinenbau.de
Das Fachportal für Profis

BDSR
euroexperts

BERTELSMANN
media worldwide

Lufthansa Cargo
The business to business class.

By simultaneously analyzing multiple wavelengths of emissions, including infrared radiation from the dust heated by young stars picked up by the Spitzer space observatory, the team was able to trace star formation and determine that the process was occurring in essentially the same way in the intergalactic medium and inside galaxies. Ultraviolet energy detected by the Galaxy Evolution Explorer and images of ionized hydrogen atoms and optical and infrared light from eight ground-based telescopes were also used.

"The best regions to study stellar evolution would be those completely devoid of old stars, and we were able to find some regions which satisfy this criteria," says Boquien, who adds that these regions are generally quite isolated, unlike star forming regions in galaxies which can be surrounded by many bright astronomical objects. "As star formation apparently occurs in a similar way in galaxies, results we obtain studying intergalactic star forming regions can be confidently extended to galaxies."

Médéric Boquien | Quelle: newswise

Weitere Informationen: www.astro.umass.edu

Rocket Rights Science DVD

Nat Geog - Space/Tech/Nature/Earth/ /Human & Bio. To educate and amaze.
www.rocketrights.com

Learn About Galaxies

New website helps you know more about the Milky Way. Free sign-up!
www.oneminuteastronomer.com

Astronomy, Science & God

"Was the Universe Created?" Get the Latest Facts from Hubble
Astronomy.CosmicFingerprints.com

Free Online Billiards

Most realistic online billiards games. Free Download!
www.GrandBilliard.com

Top

Artikel versenden

drucken

Partnerseite: Xolopo

© 2000-2008 by innovations-report


Home Über Uns
Partner Media Kontakt
Webdesign by freitag
Sitemap find and help
Englisch Impressum


B2B Suche


- ☒ Produkt / Dienstleistung
☐ Firma / Organisation

Anzeige

Aktuell

 Das Schutzprotein HO-1 als Angriffspunkt für die Krebstherapie
04.06.2008 | Biowissenschaften
Chemie

 Mutations Induce Severe Cardiomyopathy
04.06.2008 | Biowissenschaften
Chemie

 Parasitoid turns host into bodyguard
04.06.2008 | Biowissenschaften
Chemie

