

B.K.M.SCIENCE COLLEGE,VALSAD

A lecture on
"Olbers Paradox and the Expanding Universe"
Physics Department.
13th October 2016

A Lecture was organized by the Department of Physics on 13th October 2016 as part of Student extension activity program. Principal of P.T.Science College, Surat was invited to address the students on "Olbers Paradox and the Expanding Universe". The programme began with a prayer by student of the college. The invited guest was heartily welcomed by the Prof.A.J.Goel.

Principal Dr.Vikas Desai has focused on such lectures which help students to expand their area of knowledge and add to their quantum of knowledge and will also enlighten students on different latest Physics topics. Vice principal Dr.T.G.Gohil told that such interactive lecture will enrich the mind of students, giving them windows to explore, the marvelous world of science and scientific pursuits. Head of the Physics department Prof.U.K.Patel gave information about lecture and told that Such programs in fact help in student enrichment through knowledge transfer from experts to students and faculties.

The distinguished speaker in his lecture explained that, in astrophysics and physical cosmology, Olbers' paradox, named after the German astronomer Heinrich Wilhelm Olbers, also known as the "dark night sky paradox", is the argument that the darkness of the night sky conflicts with the assumption of an infinite and eternal static universe. In the hypothetical case that the universe is static, homogeneous at a large scale, and populated by an infinite number of stars, then any line of sight from Earth must end at the (very bright) surface of a star and hence the night sky should be completely illuminated and very bright. This contradicts the observed darkness and non-uniformity of the night.



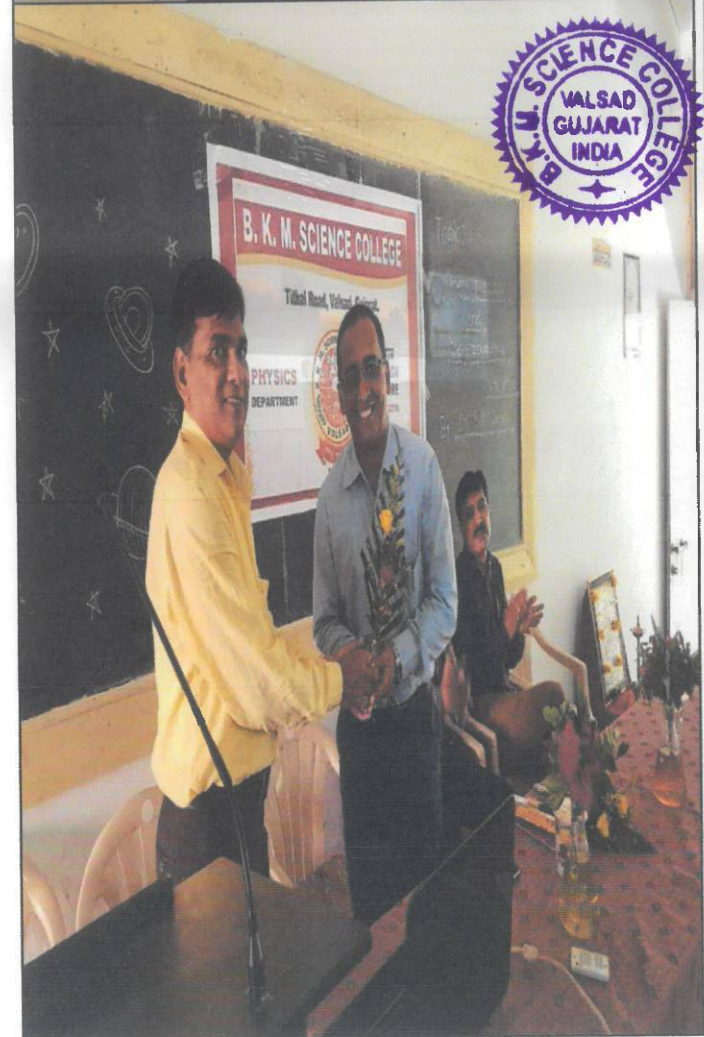
He summarized Olbers assumptions were 1) The Universe is homogeneous - so the average distance between stars and the average luminosity of a star is constant throughout space. 2) The Universe is unchanging in time when viewed on a large enough scale. The paradox is that a static, infinitely old universe with an infinite number of stars distributed in an infinitely large space would be bright rather than dark. "Olbers" paradox that the sky is not uniformly bright although it contains – to all intents and purposes – an infinite number of stars". The article goes on to say that "the paradox is resolved by the fact that the universe is expanding, which means that distant light has not yet reached us".

He also Explained According to the Standard Model of particle physics, the particles that make up an atom—quarks and electrons—are point particles: they do not take up space. ... Physical space is often regarded as infinitely divisible: it is thought that any region in space, no matter how small, could be further split. An infinite number cannot actually exist, nor be counted through or 'traversed', or be increased. Something cannot come into existence if this requires an infinite number of other things existing before it. Therefore, the world cannot be infinite. In physical cosmology, the Big Rip is a hypothetical cosmological model concerning the ultimate fate of the universe, in which the matter of the universe, from stars and galaxies to atoms and subatomic particles, and even space time itself, is progressively torn apart by the expansion of the universe at a certain time.

The lecture was very interactive and was well received by the students since they have participated actively in the question- answer session which has made the program succesful. It was very enriching and enlightening lecture for the students and for the faculty as well. The vote of thanks was given by Dr.Prof.P.H.Mistry of Physics Department.



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સાયન્સ કોલેજમાં આંતરકોલેજ વ્યાખ્યાન યોજાયું

વલસાડ | વલસાડની બી.કે.એમ સાયન્સ કોલેજમાં આંતરકોલેજ વ્યાખ્યાન અંતર્ગત ભૌતિકશાસ્ત્ર વિભાગ દ્વારા વ્યાખ્યાનનું આયોજન કરવામાં આવ્યું હતું. જેમાં સુરતથી પી.ટી. સાયન્સ કોલેજના આચાર્ય ડો. પૃથુલ દેસાઈ “ઓલબર્સ પેરાડોક્સ એન્ડ ધ એક્સપાન્ડિંગ યુનિવર્સ” વિષય પર તેમના વિચારો રજૂ કર્યા હતા. જેમાં વિદ્યાર્થીઓએ મોટી સંખ્યામાં ભાગ લીધો હતો. વિદ્યાર્થીઓએ વ્યાખ્યાન નાં અંતમાં પોતાના પ્રશ્નો પૂછી સ્પષ્ટતા મેળવી હતી. કોલેજના આચાર્ય ડો. વિકાસ દેસાઈએ માહિતી સભર વ્યાખ્યાન યોજવા પાછળની ભૂમિકા સમજાવી હતી. ઉપાચાર્ય ડો. ટી. જી. ગોહિલે વ્યાખ્યાન યોજવા માટે ભૌતિકશાસ્ત્ર વિભાગને અભિનંદન આપ્યા હતા. વિભાગના અધ્યક્ષ યુ.કે. પટેલ અને સ્ટાફના સભ્યોએ કાર્યક્રમને સફળ બનાવવા જહેમત ઉઠાવી હતી. પ્રા. તુષારભાઈ દેસાઈએ કાર્યક્રમનું સંચાલન કર્યું હતું.

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કોમર્સ કોલેજમાં વિદ્યાર્થી દિન ઉજવાયો

વલસાડની કોમર્સ કોલેજમાં રાષ્ટ્રીય સેવા