

One hundred years ago in 1905 Alfred Einstein wrote his paper on Special Relativity which defined space and time together with electrical and magnet fields in a mathematical way. In 1912 Einstein's second paper tied in gravitational fields. Few believed him until his prediction that the gravitational field of the Sun would bend light from a distant star was proved correct by Sir A.S.Eddington who observed a star change apparent position as its light passed close to the Sun during an eclipse.

Relativity also explained the rotation of the elliptical path of the planet Mercury. Time runs slower for the planet when it was closer to the Sun where the gravitational field is stronger, this causes the direction of the longest axis of the elliptical path to slowly rotate. Now our world of atomic power, lasers and satellite navigation would not exist without his wonderful understanding of Physics.

While everything works mathematically in terms of the curvature of empty space no one has the slightest idea what this means. When I try to put my understanding into simple words all I can produce is a string of what appear to be impossible statements. I must therefore ask you bear with me while I try to say what I think is the meaning of relativity.

Firstly the conclusions of relativity are all correct, time and length of a moving object do contract when seen from a stationary view point. Gravity does slow time and the radius of a massive object is greater than its diameter divided by two times c^2 .

This follows if the universe has four dimensions of space which are all at right angles to each other. These are the familiar up and down, left and right, and forward and backward, together with the outward dimension that is associated with time. This outward distance is measured in metres as time multiplied by the speed of light. Time is not a dimension as such but only a way of counting regular oscillations of a pendulum or an atom.

Our universe consists of a surface of nothing expanding at the speed of light away from the point where it started about fifteen thousand million years ago. We are therefore on the edge of the universe moving at the speed of light into an unknowable void.

Sub atomic particles are whirlpools on the surface which at their centre rotate at the speed of light. I must not strain your credulity any further with my views but I may be able to express them better in the parish hall soon after this news letter has been delivered.

I am sure every one can agree with me that without the dedication and genius of Albert Einstein and his fellow workers in Physics, our world would be a very much poorer and more confused place.

Frank Philpot

A PICTURE PAINTS A THOUSAND WORDS

Rowlands Castle Painting Society member, Ken Arkell lets us know what's they've been getting their paintbrushes around since his last update:

“Those following the fortunes of the society, may recall that in the Christmas edition of this magazine, we were anticipating our forthcoming exhibition which was held in November last year, as well as looking forward to our Christmas party. The exhibition was quite successful, attracting over 200 entries, and, at the Christmas party, the David Homes Trophy for the best holiday picture was won by Dawn Reid for her tropical beach scene. Anne Ostler won the award for the best Christmas card both of them being presented with their prizes by Elizabeth Smyth, the painting society's current principal.



“As promised, normal service resumed on 4th January with a Life Group meeting and this was followed on 11th January with an afternoon workshop on Perspective led by Peter Brown. After an afternoon spent struggling with our ‘vanishing points’, we spent a more relaxed evening watching a demonstration by Roger Dellar, using water based media.

“On 25th January in the afternoon, Charles Sweeney took us through the finer points of drawing horses, and in the evening, Soroya French gave a demonstration using acrylics to paint a beach scene.

“A fortnight later, Tony Spencer conducted a workshop using pastels to paint a seascape, and in the evening, a very light hearted demonstration on cartoons was given by Danny Byrne. Some members even had their portraits drawn – caricatured of course!

The Winter programme is rapidly slipping away, and, at the time of writing, only three workshops and demonstrations remain. Then, in early May, after our Annual Reunion and Silver Cup Awards evening, it will be time to get out and about in the wide world for our weekly Summer Painting Picnics, but more of those in due course. In the meantime, our Membership Secretary, Anne Webber will be delighted to hear from prospective new members on 023 92 412599.”