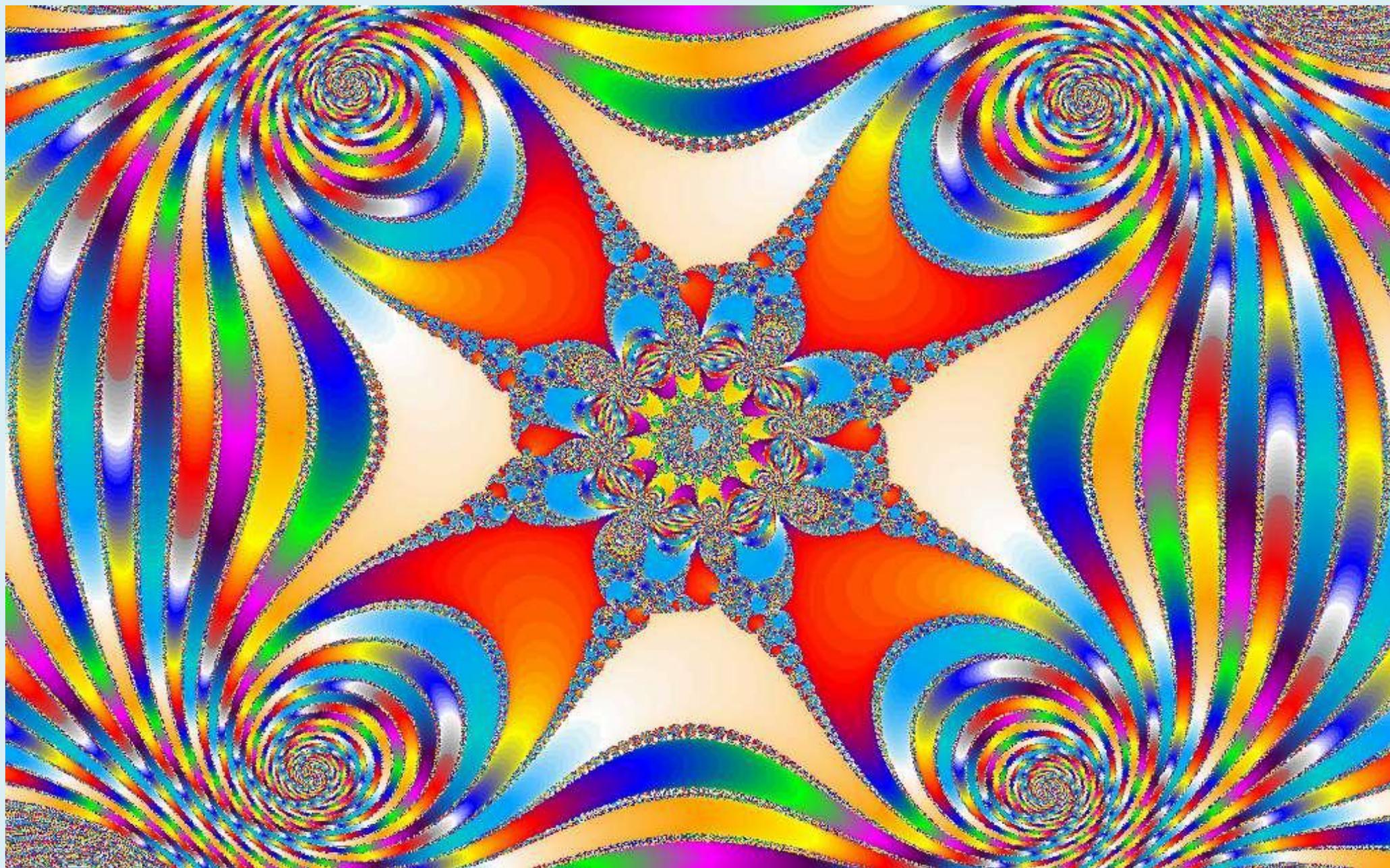


A merry Christmas an' a roarin' Hogmanay from Christopher & Juliet Monckton



27 Queen Street, Edinburgh, EH2 1JX

0131 225 5551 * MOBILE 07814 556423 * MONCKTON @ MAIL.COM

From: The Viscount and Viscountess Monckton of Brenchley

Happy Holidays (drafted by Sue Wynne-Boult, Phil Banks & Hyde Quick, US Attorneys-at-Law)

PLEASE ACCEPT – with no obligation of any kind, whether oral or written, actual or potential, explicit or implicit – our best wishes for a non-culture-specific, environmentally-conscious, socially-responsible, low-stress, zero-carbon, non-addictive, gender-neutral, politically-correct happy holiday celebration of the winter solstice, within the most enjoyable traditions of the religious persuasion or secular practice of your choice (with due consideration for the religious or secular persuasions or traditions of others, or for their choice not to practice religious or secular traditions at all, or for genuine differences of opinion as to the timing or significance of the solstice), and a fiscally-successful, personally-fulfilling and medically-uncomplicated recognition of the onset of the generally-accepted calendar year 2007, but not without due respect for the calendar choices of other cultures whose contributions to society have helped to make America great (not to imply that America is necessarily greater than any other country or is the only America in the western or any hemisphere), and without regard to the wishee's race, creed, color, age, religious faith, choice of computer platform, physical ability or sexual preference or prowess. By accepting this greeting and not entering any defense or other plea with 14 days or such other period as may be applicable as specified in federal or state law, you are accepting the following terms: This greeting is subject to clarification or withdrawal. It is freely transferable with no alteration to the original greeting. It implies no promise by the wisher actually to implement any of the wishes personally or for others. It is revocable at the sole discretion of the wisher. It is warranted to perform as expected within the parameters for the application of good tidings for a period of one year or until the issuance of a subsequent holiday greeting, whichever shall first have occurred. Warranty is limited to replacement of this wish or issuance of a new wish at the sole discretion of the wisher. This greeting constitutes the entire wish. It is void where prohibited by law. Should any part of this greeting be held unlawful or otherwise invalid, all remaining parts shall continue to have effect in terms of generally accepted wishing traditions or conventions to the full extent permissible under law.

Our stunning electronic Christmas card – the mathematician's Maltese Cross

Our e-Christmas card is an intriguing visual demonstration that the **Cross of Malta** has always existed in the underlying mathematics of the universe. The cross, festooned with glistening, coloured Christmas ribbons, seems a dazzling work of art but is inherent in chaos theory. Christopher, a Knight of Malta, found the cross while studying the Mandelbrot fractal, the most complex object in mathematics, of which this image is a minuscule region. Each pixel of the image is determined by the iterative function $f(z) = z^2 + c$, where z is initially 0 and c is a complex number, partly real and partly a multiple of i , the imaginary square root of -1 . The real part of c lies on the x axis of the Argand plane; the imaginary part lies on the y axis. Values of c , to 16 significant digits, are: top left $0.2500739507702906 + 0.0000010137903618 i$, to bottom right $0.2500739507703702 + 0.0000010137903127 i$. The figure is rotated widdershins by 15 degrees to set the cross upright. The colour of each pixel is set by counting the iterations before $|z/|$ reaches ∞ (or here, for convenience, 1000). Up to 250,000 iterations were performed to determine each individual pixel. It is remarkable that so simple a function produces so complex and beautiful an object. The design is not copyright, for the image existed in the realm of numbers before the Universe began.