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Dear Readers

The first article in this issue, by Peter Donovan, tells a fascinating story of how code breakers working at Fleet Radio Unit, Melbourne (FRUMEL) during the Second World War, were able to de-code the principal Japanese Navy operational code. This gave Australia and its allies the considerable advantage of knowing Japanese plans in advance in major battles such as the Battle of Midway.

The second article by Daniel Chan, explains how an invention of pure mathematics in 1845, has revolutionized the computer gaming industry more than one hundred and fifty years later. This mathematical invention of quaternions is responsible for the fast and fluid virtual camera movements in third person action games such as Tomb Raider.

This issue of *Parabola* also contains the list of prizewinners and complete solutions for the UNSW School of Mathematics Competition in 2004. The achievements of Ivan Guo (Sydney Boys High) in the Senior Competition and Gidon Jones (Moriah College) for First Prize in the Junior Competition, deserve special mention. Ivan has been awarded the First Prize in this competition for the second year in succession.

Finally, you might like to attempt one of the new problems created by our problems editor Tanh Tran. If you attempt a problem but cannot solve it then you can contact us and Tanh will provide you with a hint. If we like your solution or your attempt then we will publish it in the next issue *Parabola* and send you one of our Limited Edition UNSW Mathematics mugs.

B.I. Henry
Editor