





Walton Institute is a cornerstone of ICT research and development activity in Ireland since 1996, undertaking cutting edge research blending fundamental science with real world commercial applications.

Formerly known as the Telecommunications Software & Systems Group (TSSG), the aim of the Institute is to investigate futuristic next-generation technologies, to verify their capabilities and applicability for today's society, and to work in collaboration with industry to ensure their commercialisation.



# Ernest Walton

Walton Institute is named after the renowned physicist and Nobel laureate, Dr. Ernest Walton. Born in Co. Waterford, Dr. Ernest Walton dedicated his life to academia receiving numerous prizes for excellence in physics and mathematics and, most notably, the Nobel Prize in physics in 1951 for being the first to split the atom.

- Infrastructure & Testbeds
- Satellite Communications
- Quantum Computing
- Quantum Communications
- Artificial Intelligence & Machine Learning
- Adaptive and Autonomous Algorithms
- Internet of Everything
- Knowledge Defined Networking
- Security and Reliability
- Fog Data Analytics
- Beyond 5G Wireless Communications
- Pervasive Sensing & Embedded Systems
- eTextiles and Smart Materials
- Extended Reality







```
index.ts x .env.local x _app.tsx x
blog main / 9 Δ
components
  text
  presentation
library root
  api
  app.tsx
  content.tsx
  about.tsx
  index.tsx
  > public
  tests
  utils
  theme.ts
  .babelrc
  .env.example
  .env.local
  .eslintignore
  .gitignore
  next-env.d.ts
  package.json
  README.md
  tsconfig.json
  yarn.lock
  External Libraries
  Scratches and Consoles
import { useEffect } from 'react'; 8.23 kB (gzip: 3.33 kB)
import Head from 'next/head';
import type { AppProps } from 'next/app'; 5.11 kB (gzip: 1.11 kB)
import { ApolloProvider } from '@apollo/client'; 123.67 kB
import { ThemeProvider } from '@material-ui/core/styles';
import CssBaseline from '@material-ui/core/CssBaseline';
import { Container } from '@material-ui/core'; 63.32 kB
import { useApollo } from '../graphql/client';

import { lightTheme, darkTheme } from '../utils/themes';
import useLocalStorage from '../hooks/useLocalStorage';

import NavBar from '../components/NavBar';

function App({ Component, pageProps }: AppProps) {
  const [currentTheme, setCurrentTheme] = useLocalStorage('theme', 'light');
  const apolloClient = useApollo(pageProps.initialData);

  useEffect(() => {
    const jssStyles = document.querySelector('style');
    if (jssStyles) {
      jssStyles.parentElement.removeChild(jssStyles);
    }
  }, [currentTheme]);

  return (
    <>
    <Head>
      <title>ECU-DEV</title>
      <meta name="viewport" content="width=device-width, initial-scale=1" />
    </Head>
    <ThemeProvider theme={currentTheme}>
      <ApolloProvider client={apolloClient}>
        <CssBaseline />
        <Container>
          <Component {...pageProps} />
        </Container>
      </ApolloProvider>
    </ThemeProvider>
  );
}
```





# Getting Through the HDIP

**I HAVE NO IDEA  
WHAT I'M DOING**

